

Biochemical Reagent

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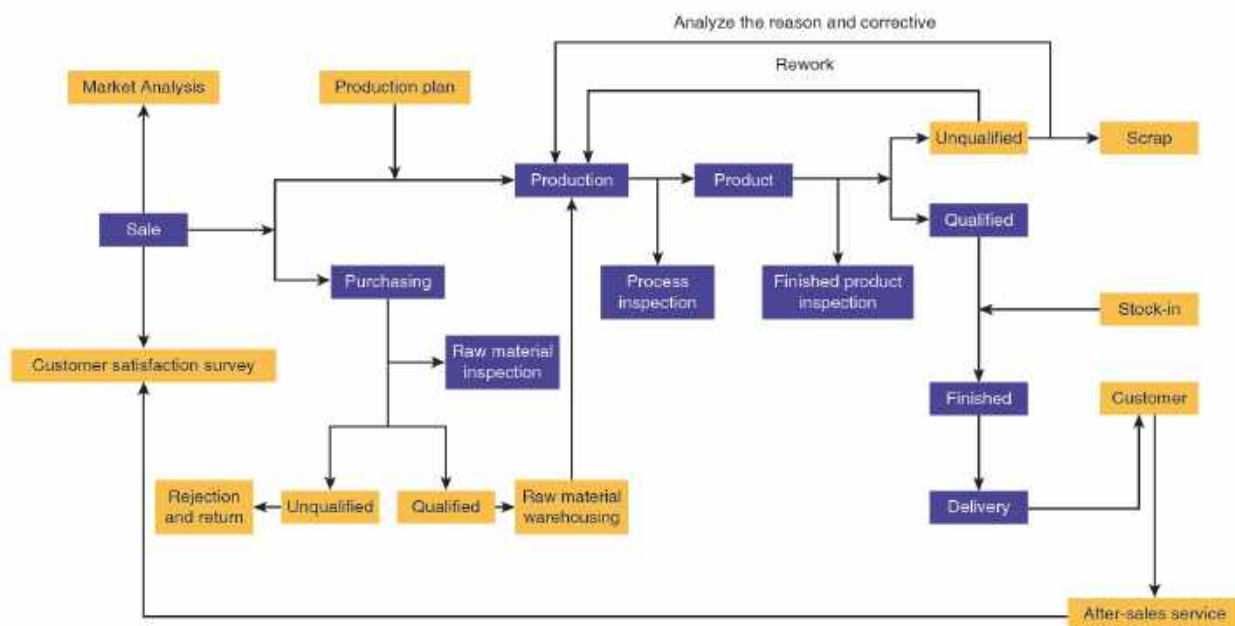
Biochemical Reagent

Product Description

Biochemical reagents refer to biological materials or organic compounds related to life science research, which can be widely used in related fields such as life science research, biological product manufacturing, agriculture, environmental monitoring, and food industry. There are nearly 6000 biochemical reagents product, with diverse specifications, stable performance, reliable quality, high literature citation rate, and the highest IF reaching 82.9. In the field of biological research, it can meet the diverse scientific research needs of molecules, proteins, cells. As a high-quality supplier of biochemical reagents, Solarbio has high recognition and praise rates, aiming to provide a one-stop procurement and comprehensive service platform for scientific researchers.

Quality Control Standards

Biochemical reagents are strictly operated in accordance with the ISO9001 quality management system standards throughout the entire process, from material procurement, production and quality control, finished product delivery, storage and transportation to customer service, ensuring traceability at all stages. The materials for biochemical reagents are all from qualified suppliers, and the products undergo three main inspection processes: material inspection, process inspection, and product inspection. The inspection items mainly include physical and chemical properties (appearance, solubility, pH, purity, etc.) and biological performance testing (biological activity, stability, sensitivity, accuracy, etc.). Each inspection and production process strictly follows SOP operating procedures to ensure product quality.



Quality Control Flow Chart

According to the metabolic substance classification of organism

Divided into amino acid, polypeptide, protein, nucleotide, nucleic acids, enzymes, coenzyme, sugar, ester, hormone, etc.

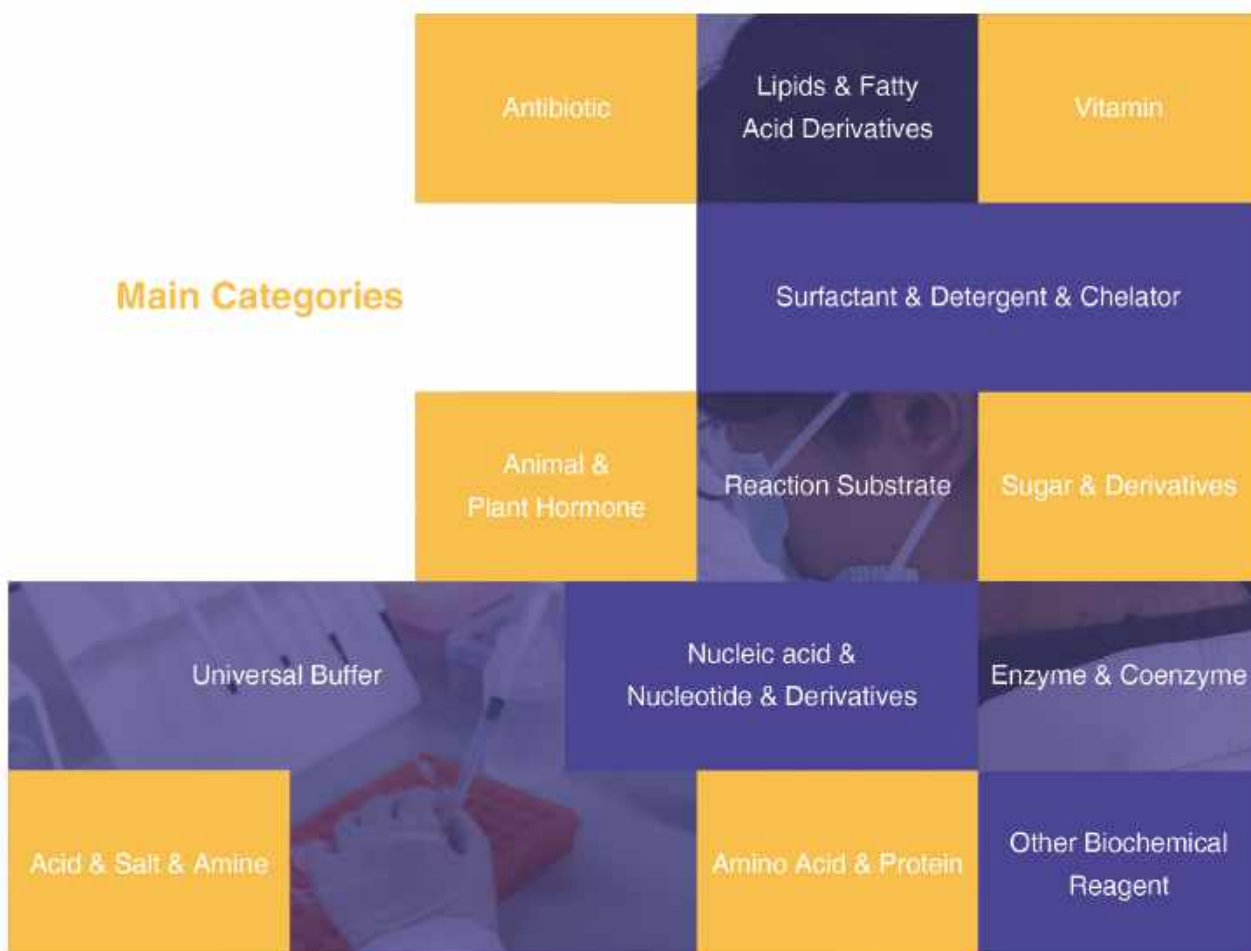
According to the biological application direction classification

Divided into molecular detection, cell detection, immune reagent, chromatography detection, system buffer, surfactants, etc.

According to the level of purity classification

It is divided into Guaranteed Reagent (GR), Analytical Reagent (AR), Chemical Pure (CP), Biological Reagent (BR), etc.

Main Categories



Application



**Cell
Biology**



**Immunity and
Labeling**



**Physiology and
Biochemistry**



**Molecular
Biology**



**Resistance and
Screening**



System Buffer



Surfactant



Induce Apoptosis

Catalog	Product Name	Catalog	Product Name
A8510	Bafilomycin A1	B9270	Bleomycin A5 Hydrochloride
A8790	Azacitidine	C8040	Cytosine β -D-Arabinofuranoside
G8970	Gemcitabine	W8030	Wortmannin
F8300	5-Fluorouracil	S9990	S-Adenosyl-L-Methionine Disulfate Tosylate
T8850	Tacrolimus	C8460	N-Acetyl-L-Cysteine
A8240	Adenosine	F8850	Flufenicol

Inhibit Proliferation

Catalog	Product Name	Catalog	Product Name
M8971	Methotrexate	M8670	Monensin Sodium
L7790	Evodine	N8310	Novobiocin
R8140	Rapamycin	F8830	Floxuridine
B8581	Brefeldin A	T9130	6-Thioguanine
B8500	Berberine Hydrochloride	C8781	Cyclosporin A
A7330	Andrographolide	S5080	Sorafenib
F8800	Fludarabine	S4840	Strigolactones

Proliferation Culture

Catalog	Product Name	Catalog	Product Name
V8020	Vitamin B1	C8000	Collagen Type II
G8230	L-Glutamine	D4420	D-Alloisoleucine
N8060	Nicotinic Acid	C9501	β -Carotene
C8110	Con A	F8090	Folic Acid
C9410	Sodium Caseinate	V8030	Vitamin B6
V8060	Ribofavin	I8050	Inositol
C8065	Rat Tail Tendon Collagen Type I (Liquid)	G7250	Glycine Ethyl Ester Hydrochloride

Coating and Adhesion

Catalog	Product Name	Catalog	Product Name
P2100	10xPoly-L-Lysine Solution	C8061	Collagen Type I (Soluble)
P8120	Poly-L-Lysine (30,000-70,000)	P8140	Poly-L-Lysine (150,000-300,000)
C8062	Rat Tail Collagen Type I	F8180	Fibronectin
C8063	Rat Tail Tendon Collagen Type I (Dry Powder)	F8181	Fibronectin
G8061	Gelatin	C8090	Collagens Polypeptide
M8370	Matrigel	D6790	Poly-D-Lysine Hydrobromide

Division and Differentiation

Catalog	Product Name	Catalog	Product Name
T8080	Thymidine	N8010	α -Naphthalene Acetic Acid
T8110	Trans-Zeatin	G8920	Gibberellin GA4+7
G9420	Tributyrin	X8040	Zeatin
B8780	Brassinolide	P6741	PMA
G8040	Gibberellic Acid (GA3)	I8020	3-Indoleacetic Acid
Z8040	Trans-Zeatin-Riboside	D8100	2,4-Dichlorophenoxyacetic Acid
I8330	2-IP	A8060	ABA

Therapeutic Agent

Catalog	Product Name	Catalog	Product Name
D9351	1,1-Dimethylbiguanide Hydrochloride (Metformin)	A8340	Artemisinin
C7090	Curcumin	D8810	Cisplatin
C9720	Chloroquine Diphosphate Salt	S5670	Syringaldehyde
S9850	Simvastatin	C9900	Capsanthin
S5950	Sitagliptin	A6900	5-AS

Agonist

Catalog	Product Name	Catalog	Product Name
C6660	Caerulein	P0420	(R)-(-)-Phenylephrine Hydrochloride
D9620	DHA	C3050	Capsaicin
P7860	Phenylephrine	S7120	D-Serine
E8880	EPA	D7770	Dexamethasone-17-Acetate
E7920	Endothelin-1	G0010	L-Glutamic Acid
R8470	Rosiglitazone Base		

Model Preparation

Catalog	Product Name	Catalog	Product Name
I8040	Insulin from Bovine Pancreas	H8780	Hexadecanoic Acid
S8050	Streptozocin STZ	A9290	Angiotensin II
I8450	3-Isobutyl-1-Methylxanthine	L8040	Pituitary Luteinizing Hormone
S9990	S-Adenosyl-L-Methionine Disulfate Tosylate	C8710	Citicoline Sodium
C8280	Cholesterol	L8880	LPS
T7260	Testosterone Propionate	A8871	N-Acetyl-Neuraminic
D5680	Deoxycorticosterone Acetate	C9480	Corticosterone
F8470	FSH	C8110	Con A
V8130	3,4-Dimethoxybenzyl Alcohol	P9970	PMSG
I8830	Recombinant Human Insulin	A8790	Azacitidine
A8051	Alloxan Monohydrate	K8160	Keyhole Limpet Hemocyanin

Separation, Extraction and Cryopreservation

Catalog	Product Name	Catalog	Product Name
F8150	Ficoll TM PM400	G8190	Glycerol
H8030	Hyaluronidase	C8260	Cellulase R-10
C8360	Cesium Chloride	C8140	Collagenase I
D8071	DNase I	D8370	DMSO
S5130	Sodium Diatrizoate	E8211	Elastase
T8150	Trypsin (1:250)	M8190	Macerozyme R-10
C8150	Collagenase II	C8160	Collagenase IV

Stress Resistance

Catalog	Product Name	Catalog	Product Name
S7080	Salicylic Acid	S8410	SOD
M8640	Methyl Jasmonate	C8071	Catalase
P0011	L-Proline	J8070	Jasmonic Acid
M9010	Methyl Salicylate	M8600	Melatonin
A8060	ABA	C9442	Alkaline Phosphatase

Neuromodulator

Catalog	Product Name	Catalog	Product Name
R8520	Risperidone	B1620	Tert-Butoxycarbonyl-D-Leucine
L8640	D-2-Amino-4-Methylpentanoic Acid	S9740	Serotonin Hydrochloride
H7280	Haloperidol	M0020	D-Methionine
M9620	Mecobalamin	L8220	Levodopa
T9280	L-Theanine	M8600	Melatonin
A6170	N-Acetyl-DL-Leucine	S2600	Sertraline Hydrochloride

Anti-Inflammatory and Antioxidant

Catalog	Product Name	Catalog	Product Name
A8100	Ascorbic Acid	I8190	1H-Indole
G8180	L-Glutathione Reduced	S5670	Syringaldehyde
C7090	Curcumin	R8350	Resveratrol
C8960	Chlorogenic Acid	R8170	Rutin
S9961	Saponin	L7790	Evodine
V8010	(+)- α -Tocopherol	D6390	Sodium Dehydroacetate
K8160	Keyhole Limpet Hemocyanin	A7330	Andrographolide



Immunity and Labeling

Immunogen

Catalog	Product Name	Catalog	Product Name
A8230	Human Serum Albumin	A9340	1-Aminocyclopropanecarboxylic Acid
F8050	Fibrinogen	N7820	NGAL
P8090	PHA-P	K8160	Keyhole Limpet Hemocyanin
S9990	S-Adenosine-L-Methionine	M7610	Mucin
A8800	Amyloid β -Protein Fragment 25-35	L8590	β -Lactoglobulin from Bovine Milk
C8110	Con A	O8070	L-Ornithine HCl
F1640	Ferritin	S9170	Streptavidin

Blocking Agent

Catalog	Product Name	Catalog	Product Name
D8340	Skimmed Milk Powder	A8010	Bovine Serum Albumin
G2810	Endogenous Biotin Blocking Solution	A7940	Bovine Serum Albumin V (ELISA)
P8060	PVP K-30 (Polyvinylpyrrolidone)	D8030	Deoxyribonucleic Acid Sodium Salt from Salmon Testes
G8061	Gelatin	D8050	Deoxyribonucleic Acid from Herring Sperm
A8020	Bovine Serum Albumin V	G2850	Peroxidase Blocking Buffer, Enhanced

Label Detection

Catalog	Product Name	Catalog	Product Name
D4470	GMBS	G1032	Galanthus Nivalis Lectin (GNL), Fluorescein
P9073	Peanut Agglutinin (PNA), Rhodamine	U8323	Ulex Europaeus Agglutinin I (UEA I), Rhodamine
P8020	HRP	N8540	NHS-Biotin
B8010	5-Bromo-2'-Deoxyuridine	L8792	Lycopersicon Esculentum (Tomato) Lectin (LEL, TL), Fluorescein
F8070	FITC	I3300	iFluor 488-Wheat Germ Agglutinin (WGA)



Physiology and Biochemistry

Glycolysis

Catalog	Product Name	Catalog	Product Name
G8020	G6PD	C8270	Cellulase
T9820	Triose Phosphate Isomerase	A9670	Aldolase
G8030	Glucose Oxidase	H8210	Hexokinase
A8750	α -Amylase from Aspergillus Oryzae	G8821	α -Glucosidase
L8080	L-Lactic Dehydrogenase	P8181	Pectinase
G8860	β -Galactosidase	P6870	Phosphoenolpyruvate Carboxylase

Lipid Metabolism

Catalog	Product Name	Catalog	Product Name
A8910	Acetylcholinesterase	P9230	Pyruvate Oxidase
T9420	Trilaurin	A8400	Alcohol Dehydrogenase (ADH)
L8621	Lipase	C7801	Lipoprotein Lipase (LPL)
F8490	Semi-Synthetic Fatty Acid Glycides	E8580	Ethyl Pyruvate

Enzymes and Substrates

Catalog	Product Name	Catalog	Product Name
G8821	α -Glucosidase (Liquid)	N8700	p-Nitrophenyl- β -D-Glucopyranoside
N8150	p-NPP	N8200	PNPG
D8350	DTNB	G8830	β -Glucosidase from Almonds
PC0022	BCA	B7000	Tetrazolium Blue Chloride
G8680	TBA	O8040	O-Nitrophenyl- β -D-Galactopyranoside
G8860	β -Galactosidase	N8930	4-Nitrophenyl- α -D-Galactopyranoside
X8060	X-Gluc	N8140	NBT

Oxidation and Antioxidant

Catalog	Product Name	Catalog	Product Name
X8020	Xanthine Oxidase	S8410	Superoxide Dismutase
S4440	Glutathione Mercaptotransferase (GST)	C9310	Coenzyme Q10
T8830	Tyrosinase	C8070	Catalase
P7230	Procyanidin	T8560	Tea Polyphenols
C8071	Catalase	N8110	NAD

Coenzyme

Catalog	Product Name	Catalog	Product Name
N8110	NAD	A0280	Acyl-CoA Synthetase
N8120	NADH Na ₂	N8100	NADPH Na ₂
T9050	Thiamine Pyrophosphate	C9640	Coenzyme A
N8210	Thio-NAD ⁺	A0270	Acyl-CoA Oxidase
A8070	Acetyl Coenzyme A	N8130	NADP Na ₂



Molecular Biology

Molecular Synthesis

Catalog	Product Name	Catalog	Product Name
A8330	Adenine	U8010	Uracil
R8021	RNase A	T8630	TRNA
C8330	Cytosine	G8260	Guanosine
G8670	Ribonucleic Acid	P8360	Pronase E
T8040	Thymine	D8070	DNase I
P2060	rTEV Protease	B8230	Betaine

Extract Digestion

Catalog	Product Name	Catalog	Product Name
L8120	Lysozyme	G8210	Guanidine Thiocyanate
P9460	Proteinase K	P8160	Pepsin (1:10000)
G8070	Guanidine Hydrochloride	P8180	Pectinase
C8270	Cellulase	L8141	Lyticase

Enzyme Inhibitor

Catalog	Product Name	Catalog	Product Name
P0100	PMSF (100 mM)	S9491	Sodium Butanoate
L8110	Leupeptin	G8390	Sodium Metavanadate
A9040	AEBSF	P8100	Pepstatin A
T9940	Tetrasodium Pyrophosphate	I8770	Imatinib
G8460	Sodium Orthovanadate	P9950	Phenanthroline
P8340	PMSF	G8100	β -Glycerol Phosphate Disodium Salt Pentahydrate
T8031	Trypsin Inhibitor	S4920	Sodium Molybdenum Oxide

Protein Purification

Catalog	Product Name	Catalog	Product Name
S9170	Streptavidin	I8090	Iminazole
P8470	Protamine Sulfate Salt	D8110	D-(+)-Maltose Monohydrate
U8020	Urea	P8360	Pronase E
G8180	L-Glutathione Reduced	P2070	UIP
P6860	SPA	L7860	r-SPG
T8021	Thrombin	E8350	Enterokinase from Bovine Intestine

Molecular Buffer

Catalog	Product Name	Catalog	Product Name
M8150	MOPS	T1081	10xTBST
T8060	Tris	T9220	TCEP-HCl
T8190	N-Tris [Hydroxymethyl] Methylglycine	M8920	MOPSO
T1120	TE Buffer (pH 8.0)	T1510	10xTris-MOPS Buffer
P8320	PIPES	G0050	0.1M Maleic Acid Buffer (pH 7.5)
M8010	MES, Free Acid, Monohydrate	S1030	20xSSC (pH 7.0)
T1072	Tris-Glycine Running Buffer, 1x (Powder)	C8400	CHES
P1033	10xPBST		



Resistance and Screening

Antibacterial

Catalog	Product Name	Catalog	Product Name
A8180	Ampicillin, Sodium Salt	M8060	Metronidazole
C8251	Carbenicillin Disodium Salt	L7790	Evodine
C8240	Cefotaxim Sodium Salt	T8180	Tetracyclin HCl
T8660	Timentin	R8010	Rifampicin
C8050	Chloramphenicol	T7680	Tylosin
G8170	Gentamycin Sulfate	R8350	Resveratrol
N8090	Neomycin Sulfate	P8350	Polymyxin B Sulfate
E8120	Epigallocatechin Gallate		

Antifungal

Catalog	Product Name	Catalog	Product Name
A8251	Amphotericin B	V8340	Voriconazole
O8150	Oligomycin	C5710	Clotrimazole
C7730	Caspofungin Acetate	F8380	Fluconazol
N8040	Nystatin	P9210	Pimaricin
I8250	Itraconazole	C7730	Caspofungin Acetate
A8252	Soluble Amphotericin B	F8321	5-Fluorocytosine
W8030	Wortmannin	K8090	Ketoconazole

Antivirus-Parasite

Catalog	Product Name	Catalog	Product Name
N8310	Novobiocin Sodium Salt	D8960	Doxycycline Hyclate
S4130	DL-Serine	S9571	Sulfamonomethoxine
M8670	Monensin Sodium	G8410	γ-Globin
L8230	Levamisole Hydrochloride	R8370	Ribavirin
R8170	Rutin	T7680	Tylosin
K8160	Keyhole Limpet Hemocyanin	O8240	Oseltamivir Phosphate

Mycoplasma/Chlamydia Inhibitor

Catalog	Product Name	Catalog	Product Name
R8011	Rifampicin	R8320	Roxithromycin
T9180	Tetracycline	G9680	Gatifloxacin
E8761	Enrofloxacin	E8100	Erythromycin
A7220	Azithromycin	L8730	Levofloxacin
C9490	Clarithromycin	CA1090	Mycoplasma Scavenger
D8960	Doxycycline Hyclate	O8060	Oxytetracycline HCl

Screening

Catalog	Product Name	Catalog	Product Name
P8230	Puromycin	G8170	Gentamycin Sulfate
C8050	Chloramphenicol	A6870	Aureobasidin A
Z8020	Zeocin	N8090	Neomycin Sulfate
G8160	G-418 Sulfate	K8020	Kanamycin
A8180	Ampicillin, Sodium Salt	B9300	Blasticidin S Hydrochloride
H8081	Hygromycin B	X8050	5-Bromo-4-Chloro-3-Indolyl-β-D-Galactopyranoside

Antiseptic

Catalog	Product Name	Catalog	Product Name
P6840	PC-300 Liquid Biological Preservative	E2080	Ethylparaben
S5480	Sodium Benzoate	P6846	PC-950 Liquid Biological Preservative
M8990	Methyl 4-Hydroxybenzoate	D9740	Dehydroacetic Acid
P9672	Potassium Sorbate	C7630	Calcium Propionate



System Buffer

Biological Buffers

Catalog	Product Name	Catalog	Product Name
H8090	HEPES	E8040	EDTA
C8410	CAPS	T8060	Tris
D8490	Dipotassium Hydrogen Phosphate	D9790	Disodium Phosphate Dodecahydrate
B8020	BICINE	M1010	10xMOPS Buffer

Culture Cleaning

Catalog	Product Name	Catalog	Product Name
P1022	PBS, 10x	H1147	HBSS Buffer Solution
D1041	D-PBS	G0150	TESCA Buffer (pH 7.4, Sterile)
H1095	1M Hepes (pH 7.2-7.4, Sterile)	C1013	Sodium Citrate Buffer (pH 4.5, Sterile)
T1110	STE/TNE Buffer	H1045	D-Hanks
T1150	1M Tris-HCl (pH 8.0)	H1025	Hanks
H2045	EBSS (without Calcium, Magnesium, Phenol Red)	S5243	7.5% Sodium Bicarbonate

Artificial Simulated Fluid

Catalog	Product Name	Catalog	Product Name
A7990	Artificial Saliva	H2470	Artificial Sweat
A7930	Artificial Blood	A7720	Artificial Tears
A1790	Artificial Intestinal Fluid	H2490	Artificial Sebum
A7730	Artificial Nasal Fluid	B3510	Artificial Bile
H2530	Artificial Lung Fluid	H7700	Artificial Cerebrospinal Fluid
A6660	Artificial Urine	A7921	Artificial Gastric Fluid SGF (Sterile)

Maintain pH

Catalog	Product Name	Catalog	Product Name
A8680	Ampholine (pH 3.0-10.0)	PH0040	Calibration Solution (pH 4.01)
PH0686	Calibration Solution (pH 6.86)	PH0918	Calibration Solution (pH 9.18)
PH0100	Calibration Solution (pH 10.01)	A8710	Ampholine (pH 6.0-9.0)
A8700	Ampholine (pH 5.0-7.0)	PH0070	Calibration Solution (pH 7.01)



Surfactant

Washing Effect

Catalog	Product Name	Catalog	Product Name
T8210	Triton X-114	M7670	MES
D7370	DDAB	B8700	Benzalkonium Chloride
D5000	Dodecylbenzenesulfonic Acid	P9900	Polyoxyethylene Lauryl Ether
S7420	Surfactant S7	T8220	Tween-20

Foaming and Defoaming

Catalog	Product Name	Catalog	Product Name
P8250	PEG 6000	S4370	Sodium Octyl Sulfate
T8730	Tween-60	S7530	S11 Surfynol 485
S7450	Surfactant S21	P8260	PEG 8000
S7510	AOS	YS167123	PDMS
P8530	PEG 400	L7750	N-Lauroylsarcosine
S8010	SDS	S7420	Surfactant S7
S7480	Pluronic F-68	S7590	Pluronic L64

Emulsification Effect

Catalog	Product Name	Catalog	Product Name
S5500	Span 20	S7580	S18 Cremophor EL
D8000	DTAB	S7560	Triton X-305
P9900	Polyoxyethylene Lauryl Ether	H8980	Cetyltrimethylammonium Chloride Solution
S7470	S1 Surfactant Ninate 411	S4340	Sodium Ligninsulfonate
S5260	Span 80	S7550	Triton X-45
P6600	Potassium Stearate	S7460	Surfactant S22

Osmotic Effect

Catalog	Product Name	Catalog	Product Name
T8200	Triton X-100	S8100	SLS
C8440	CTAB	L8951	Lithium Dodecyl Sulfate
S7180	SDS	T8360	Tween-80
S4370	Sodium Octyl Sulfate	S9430	Surfactant L-77
N8032	NP-40	L7750	N-Lauroylsarcosine

Dispersion and Solubilization

Catalog	Product Name	Catalog	Product Name
P9900	Polyoxyethylene Lauryl Ether	A9640	Sodium Alginate
S7430	Surfactant S9	C9520	Cremophor EL-40
H8980	Cetyltrimethylammonium Chloride Solution	S4340	Sodium Lignosulfonate
L8190	Locust Bean Gum	G8061	Gelatin
S7440	Surfactant S17	N8032	NP-40

Hot-sale Products

Catalog	Product Name
A0012	L-Aspartic Acid
A0013	L-Arginine
A6920	Ampicillin
A7031	Ammonium Acetate
A8010	Bovine Serum Albumin
A8020	Bovine Serum Albumin V
A8051	Alloxan Monohydrate
A8101	L-Ascorbic Acid/Vitamin C
A8140	Alcian Blue 8GX
A8180	Ampicillin, Sodium Salt
A8190	Agar, Powder
A8201	Agarose
A8252	Soluble Amphotericin B
A8270	Adenosine-5'-Triphosphate Disodium Salt Hydrate
A8350	Agarose, Low Melting Gel
A8821	Ammonium Sulfate
A9281	Acarbose
B8030	Hoechst NO33258
B8040	Hoechst NO33342
B8050	X- α -Gal
B8120	Bromphenol Blue
C0012	L-Cysteine
C7030	Corn Oil
C8050	Chloramphenicol
C8080	Cytochalasin B
C8140	Collagenase I
C8150	Collagenase II
C8160	Collagenase IV
C8251	Carbenicillin Disodium Salt
C8280	Cholesterol
C8420	Coomassie Brilliant Blue G-250
C8430	Coomassie Brilliant Blue R-250
C8440	Cetyltrimethylammonium Bromide, CTAB
D8030	Deoxyribonucleic Acid Sodium Salt from Salmon Testes
D8071	DNase I
D8220	1,4-Dithio-DL-Threitol, DTT
E1170	0.5 M EDTA, pH 8.0

Catalog	Product Name
E8080	Eosin Y, Alcohol Soluble
E8090	Eosin Y, Water Soluble
E8170	EDC ·HCL
F8301	5-Fluorouracil
G8150	D(+)-Glucose
G8180	L-Glutathione Reduced
G8190	Glycerol
G8200	Glycine
G8210	Guanidine Thiocyanate
G8720	Gallic Acid
G8910	Gibberellic Acid
H8090	HEPES, Free Acid
H8780	Hexadecanoic Acid
I8070	IPTG
I8830	Recombinant Human Insulin
K8020	Kanamycin Sulfate
L8050	L- α -Lecithin
L8080	L-Lactic Dehydrogenase
L8120	Lysozyme
L8880	Lipopolysaccharides, LPS
M0031	HPD100 Macroporous Adsorption Resin
M0050	HPD300 Macroporous Adsorption Resin
M0052	HPD722 Macroporous Adsorption Resin
M0053	HPD400 Macroporous Adsorption Resin
M0055	HPD450 Macroporous Adsorption Resin
M0058	HPD500 Macroporous Adsorption Resin
M8180	Thiazolyl Blue, MTT
M8520	MS Medium
M8600	Melatonin
N8060	Nicotinic Acid
N8070	Nicotinamide
N8140	Nitroblue Tetrazolium Chloride
N8150	p-Nitrophenyl Phosphate, Disodium, Hexahydrate, p-NPP
P1000	PBS (Tablets)
P1010	0.01M PBS (Powder, pH 7.2-7.4)
P1020	PBS, 1 $\times$ (pH 7.2-7.4, 0.01 M, Cell Culture)
P6741	Phorbol 12-Myristate 13-Acetate, PMA

Featured Products

1,4-Dithio-DL-Threitol (Cat.No D8220)

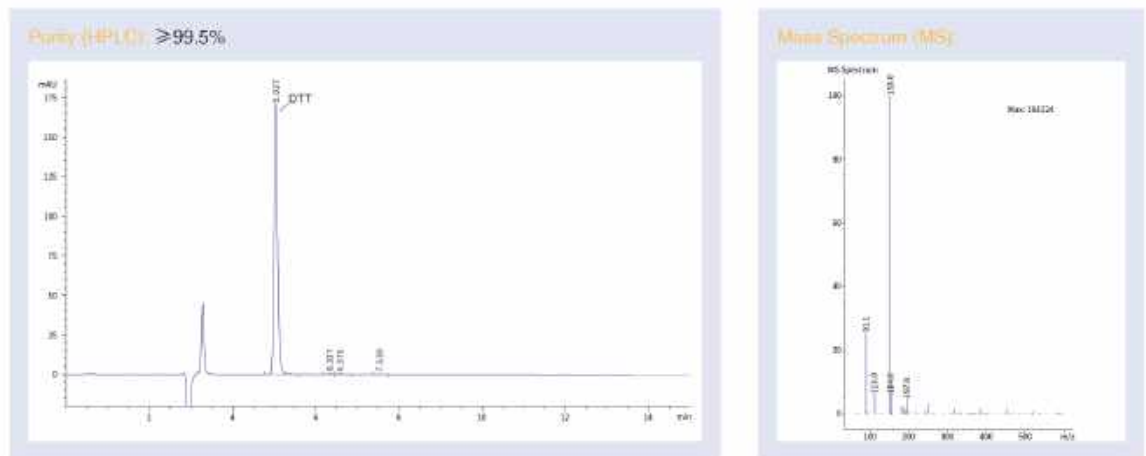
01 Product Description

1,4-Dithio-DL-Threitol (DTT) is a strong reducing reagent that can reduce protein S-S bonds. It is commonly used as a thiol protecting agent and enzyme specific inhibitor in biochemical research.

02 Quality Control

Test	Specification	Test method
Appearance	White to off-white powder	Visual inspection
Purity	≥ 99.5%	HPLC
Solubility (100 mg/mL, H ₂ O)	Clear colorless liquid	Solubility testing
UV (0.1 M, H ₂ O, 25°C)	A260 ≤ 0.4; A280 ≤ 0.1	UV
pH (0.1 M, H ₂ O, 25°C)	4.0-6.5	pH detection
Mass Spectrum	Conforms to structure	MS
Biological Performance Testing	Preparation of SDS-PAGE sample buffer	Protein denaturation treatment

Data



03 Application

- 1 As reducing and deprotecting agents for thiolated DNA.
- 2 Reducing disulfide bonds in proteins.
- 3 Stabilizers of enzymes, antibodies and growth factors.
- 4 Large-scale isolation and purification of proteins.

04 Case Study

01

Protein isolation and purification (2 mM DTT); stable enzyme activity (10 mM DTT)

Source: Structural mechanism of a dual-functional enzyme DgpA/B/C as both a C-glycoside cleaving enzyme and an O-to-C-glycoside isomerase (DOI: 10.1016/j.apsb.2022.05.022)

02

As reducing agent

Source: The plant immune receptor SNC1 monitors helper NLRs targeted by a bacterial effector (DOI: 10.1016/j.chom.2023.10.006)

03

Reducing agents and deprotecting agents for thiolated DNA (110 mM DTT)

Source: Protocol for optimal quality and quantity pollen DNA isolation from honey samples (DOI: 10.7171/jbt.14-2504-001)

05

Related Products

Catalog	Product Name	Catalog	Product Name
D8220	1,4-Dithio-DL-Threitol	P1018	SDS-PAGE Loading Buffer, 2x (with DTT)
P1040	SDS-PAGE Loading Buffer, 5x (with DTT)	D1070	1M DTT Solution
P1015	SDS-PAGE Loading Buffer, 4x (with DTT)	P1325	Tris-Tricine-SDS-PAGE Loading Buffer, 2x (with DTT)

IPTG (Isopropyl- β -D-Thiogalactoside) (Cat.No I8070)

01

Product Description

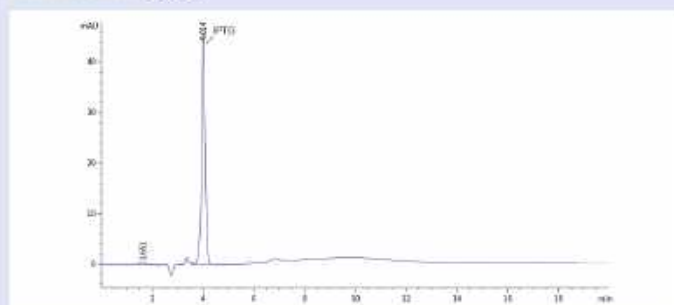
Isopropyl- β -D-thiogalactoside (IPTG) is an allolactose mimic that can induce the transcription process of lactose operon and participate in gene regulation, protein expression, and recombinant protein production. Generally used to induce gene expression in bacterial systems or in combination with X-gal chromogenic substrates for blue and white spot screening.

02

Quality Control

Test	Specification	Test method
Appearance	White crystalline powder or particle	Visual inspection
Solubility (50 mg/mL, H ₂ O)	Colorless clear solution	Solubility testing
pH (5% Aqueous Solution)	5.0-7.0	pH detection
Purity	$\geq 99.0\%$	HPLC
Biological Performance Testing	Protein induction	

Data

Purity (HPLC): $\geq 99.0\%$ 

Protein Induction: Protein Induction



03 Application

1 Protein expression and purification.

2 Induction of gene expression.

3 Clones inducing β -galactosidase activity (blue-white spot screening).

04 Case Study

01

Protein expression and purification (E.coli BL21, 1 mM, 18°C, 24 h)

Source: Phosphoantigens glue butyrophilin 3A1 and 2A1 to activate V γ 9V δ 2 T-cells (DOI: 10.1038/s41586-023-06525-3)

02

Protein expression and purification (E.coli BL21, 0.6 mM, 37°C, 7 h)

Source: A rabies virus-vectored vaccine expressing two copies of the Marburg virus glycoprotein gene induced neutralizing antibodies against Marburg virus in humanized mice (DOI: 10.1080/22221751)

03

Blue-White screening (60 μ L 20 mg/mL X-gal, 8 μ L 20% IPTG solution)

Source: Blue-white screening liquid can eliminate false positives in blue-white colony screening (DOI: 10.4238/gmr.15027925)

05 Related Products

Catalog	Product Name	Catalog	Product Name
I8070	IPTG (Isopropyl β -D-Thiogalactopyranoside)	I1020	IPTG Solution (50 mg/mL)

Bovine Serum Albumin V (Cat.No A8020)

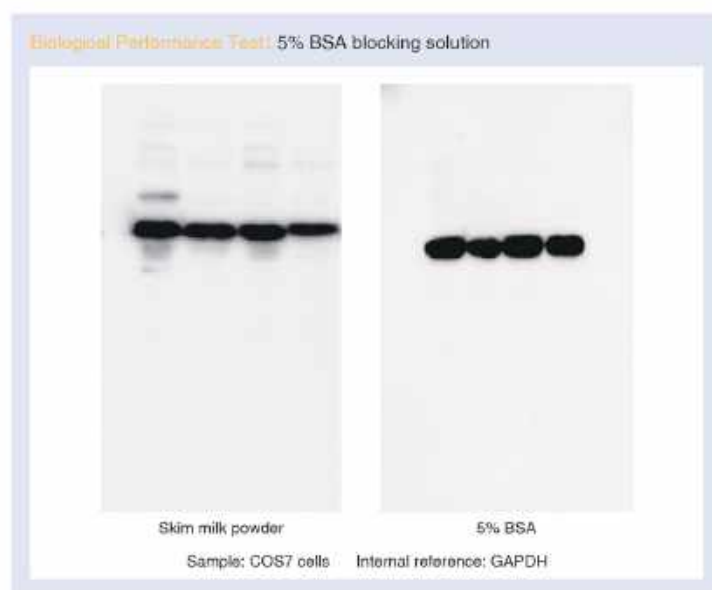
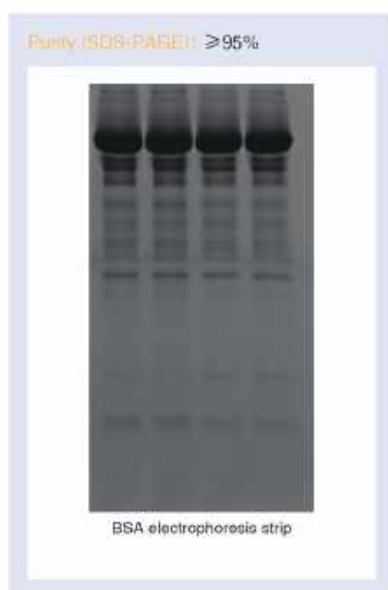
01 Product Description

BSA is a globular protein composed of three homologous full alpha helical domains, totaling 583 amino acids. It has good water solubility and a molecular weight of 66.4 kDa, which can be used in various immune, cellular, and biochemical experiments.

02 Quality Control

Test	Specification	Test method
Appearance	White to light yellow lyophilized powder	Visual inspection
Purity	$\geq 95\%$	SDS-PAGE protein gel electrophoresis
Solubility (100 mg/mL, H ₂ O)	Light yellow transparent solution	Solubility testing
pH (1% Aqueous Solution)	6.5-7.1	pH detection
Biological Performance Testing	Protein blockade, the background is clean and free of impurities	WB

Data



03 Application

- 1 Stabilizer of the enzyme.
- 2 Additives for tissue and cell culture.
- 3 Protein quantification standards.
- 4 PCR additive.
- 5 Used as an immunogen to construct immune models.
- 6 Immunoblocking agents.

04 Case Study

- 01**

Alleviate the inhibitory effect in the PCR reaction

Source: BSA reduces inhibition in a TaqMan assay for the detection of *Batrachochytrium dendrobatidis*. (DOI: 10.3354/dao02053)
- 02**

Immunohistochemistry blocking buffer

Source: Cytoplasmic SIRT6-mediated ACSL5 deacetylation impedes nonalcoholic fatty liver disease by facilitating hepatic fatty acid oxidation (DOI: 10.1016/j.molcel.2022.09.018)
- 03**

Vasculitis induction in mice

Source: TNF inhibitors target a mevalonate metabolite/TRPM 2/calcium signaling axis in neutrophils to dampen vasculitis in Behçet's disease (DOI: 10.1038/s41467-024-53528-3)

05 Related Products

Catalog	Product Name	Catalog	Product Name
A8020	Bovine Serum Albumin V	H1130	7.5% BSA Solution (Cell Culture)
A8010	Bovine Serum Albumin	PC0001	Protein Standard Solution (5 mg/mL BSA)
A8850	Bovine Serum Albumin BSA-V (without Fatty Acid)	A1820	HRP-Conjugated Antibody Dilution Buffer

Trypsin 1:250 (Cat.No T8150)

01 Product Description

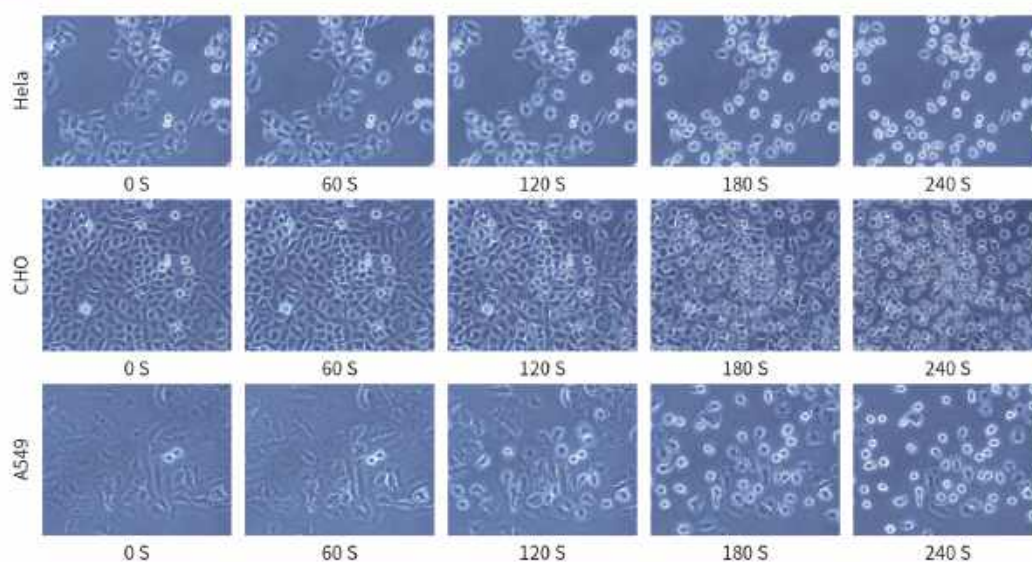
Trypsin is a serine protease that specifically acts on the carboxyl terminus of Lys or Arg residues of proteins or peptide chains. It is an important enzyme reagent in biology.

02 Quality Control

Test	Specification	Test method
Appearance	White powder	Visual inspection
Solubility (0.25%, PBS)	Colorless transparent solution	Solubility testing
pH (0.2% Aqueous Solution)	3.0-5.0	pH detection
Trypsin (U/mg)	≥ 250	"Chinese Pharmacopoeia 2020"
Chymotrypsin (U/mg)	≤ 75	"Chinese Pharmacopoeia 2020"
Loss on Drying	$\leq 0.5\%$	Halogen moisture tester detection
Biological Performance Testing	Cell digestion effect detection, it has a digestive effect on most cells in 2 minutes.	

Data

Biological Performance Test: the trypsin digestive solution (0.25%) was prepared to digest different cells and test the digestion effect.



Note: The above are different digested cells, namely HeLa, CHO, and A549. At 2 minutes, the microscopic cell morphology began to become round and the visual field became brighter.

03 Application

- 1 Trypsin is used as molecular weight standard.
- 2 Degradation of extracellular matrix for cell subculture.
- 3 Hydrolyze proteins for proteomics research.
- 4 Used for preparing single-cell suspensions.
- 5 Used for separation and purification of protein&peptide.
- 6 Used for in vitro digestion, cell differentiation, etc.

04 Case Study

01

Digestion of the soluble proteins

Source: Physicochemical properties and biological functions of soluble dietary fibers isolated from common and Tartary buckwheat sprouts (DOI: 10.1016/j.lwt.2023.114944)

02

Peptides were obtained by enzymatic digestion

Source: Conversion of Baijiu distillers' grains to functional peptides: Process optimization and antioxidant activity evaluation (DOI: 10.1016/j.jff.2023.105722)

03

Cell passaging

Source: Functionalized spiral-rolling millirobot for upstream swimming in blood vessel (DOI: 10.1002/adv.202200342)

05 Related Products

Catalog	Product Name	Catalog	Product Name
T8150	Trypsin, 1:250	T8153	Recombinant Trypsin (Mass Spectrometry Grade)
T1300	Trypsin-EDTA Solution, 0.25% (without Phenol Red)	T1360	Trypsin Digestion Solutions, 0.25% (with Phenol Red)

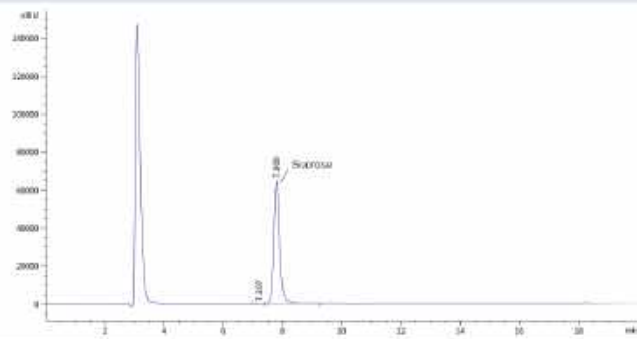
Sucrose (Cat.No S8271)

01 Product Description

Sucrose is a disaccharide formed by the condensation and dehydration of one molecule of glucose and fructose. It has the characteristics of sweetness, odorlessness, and easy solubility in water. It is a non reducing sugar that exists in large quantities in nature.

02 Quality Control

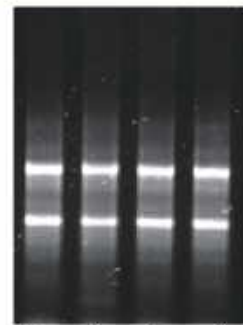
Test	Specification	Test method
Appearance	White to light yellow crystalline particles	Visual inspection
Solubility (10%, Water)	Colorless and transparent solution	Solubility testing
pH (1 M in Water)	5.5-7.5	pH detection
Purity	≥ 99.9%	HPLC
Chloride	< 0.005%	General rule 0801 of "Chinese Pharmacopoeia 2020"
Glucose	≤ 0.1%	Glucose Content Assay Kit (BC2505)
Loss on Drying	≤ 0.03%	Halogen moisture tester detection
Reducing Sugar	The volume difference between the blank and the sodium thiosulfate titrant (0.1 mol/L) consumed by the test sample shall not exceed 2.0 mL (0.10%)	"Chinese Pharmacopoeia 2020"
Identification (IR)	Heating generates a red precipitate of cuprous oxide	"Chinese Pharmacopoeia 2020"
Ultraviolet Absorption	285 nm	UV
DNase, RNase	None	Agarose gel electrophoresis

Purity: $\geq 99.9\%$ 

DNase, RNase and Protease Tests: none



blank control 1
blank control 2
experimental group 1
experimental group 2



blank control 1
blank control 2
experimental group 1
experimental group 2

03 Application

- 1 As a nutritional sweetener in the field of food research.
- 2 As an additive to biological culture media.
- 3 As tissue dehydrating agents, stabilizers, etc.
- 4 Used for separating&purifying different densities substances.
- 5 Participate in various biochemical reactions (such as preparation of metabolic disease models, microbial induction identification, etc.).

04 Case Study

01

Cell lysis components, separation of subcellular organelles

Source: Inhibition of USP14 influences alphaherpesvirus proliferation by degrading viral VP16 protein via ER stress-triggered selective autophagy (DOI: 10.1080/15548627.2021.2002101)

02

Added components of the plant culture

Source: Transfer learning enables identification of multiple types of RNA modifications using nanopore direct RNA sequencing (DOI: 10.1038/S41467-024-48437-4)

05 Related Products

Catalog	Product Name	Catalog	Product Name
S8271	Sucrose	G2463	Sucrose-PBS Solution 5%
G2460	Sucrose-PBS Solution 30%	G2130	Sucrose-PFA Solution 5%
G2461	Sucrose-PBS Solution 20%	G2131	Sucrose-PFA Solution 10%
G2462	Sucrose-PBS Solution 10%	G2132	Sucrose-PFA Solution 20%

Tris (Cat.No T8060)

01 Product Description

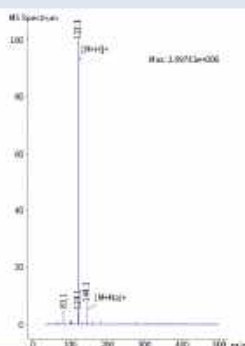
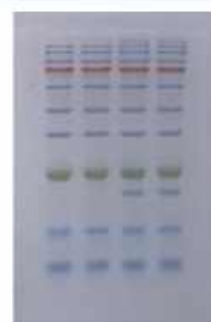
Tris is an amino-based alkaline buffer reagent with characteristics such as pH stability, high conductivity, low ionic strength, and good water solubility. Its effective buffering pH range is 7.0-9.2. In the processing of biological cells and tissues, it is generally non-toxic and non-irritating, and is widely used as a biological buffer to maintain the stability of solution pH.

02 Quality Control

Test	Specification	Test method
Appearance	White crystalline powder	Visual inspection
Solubility (121 mg/mL, H ₂ O)	Colorless to yellowish transparent solution	Solubility testing
Purity	≥ 99.5%	Titrimetric analysis
pH (5% H ₂ O)	10.0-11.5	pH detection
UV Absorbance (40% H ₂ O)	OD260nm ≤ 0.10, OD280nm ≤ 0.08 OD290nm ≤ 0.05, OD400nm ≤ 0.02	UV
Loss on Drying	≤ 0.5%	Halogen moisture tester detection
Mass Spectrum	Conforms to structure	MS
Performance Testing	Protein gel electrophoresis, the protein bands are clear and complete	WB

Data

Mass Spectrometry:

Biological Performance Test:
Tris-glycine gel electrophoresis

03 Application

1 As a pH regulator, stabilizes the electrophoresis process.

2 As an alkaline buffer, has a good buffering effect.

3 As an intermediate in drug synthesis, it participates in the construction of drug molecules.

04 Case Study

01

Preparation of protein electrophoresis buffer (Tris-Glycine Running Buffer)

Source: Autonomous sensing of the insulin peptide by an olfactory G protein-coupled receptor modulates glucose metabolism (DOI: 10.1016/j.cmet.2021.12.022)

02

Composition of the cell lysis (Tris-HCl)

Source: Inhibition of USP14 influences alphaherpesvirus proliferation by degrading viral VP16 protein via ER stress-triggered selective autophagy (DOI: 10.1080/15548627.2021.2002101)

05 Related Products

Catalog	Product Name	Catalog	Product Name
T8060	Tris (Hydroxymethyl) Aminomethane	T1010	1.5M Tris-HCl (pH 8.8)
T1130	1M Tris-HCl (pH 7.0)	T1070	Tris-Glycine Running Buffer, 5x
T1170	1M Tris-HCl (pH 8.8)	C1038	Tris-EDTA Antigen Retrieval Solution, 1x pH 9.0

Kanamycin (Cat. No K8020)

01 Product Description

Kanamycin sulfate is an aminoglycoside antibiotic that mainly blocks protein synthesis by binding to the 30S ribosomal subunit of bacteria. It has inhibitory effects on the growth of most Gram positive bacteria, Gram negative bacteria, and mycoplasma.

02 Quality Control

Test	Specification	Test method
Appearance	White to off-white powder	Visual inspection
Solubility (100 mg/mL, H ₂ O)	Colorless transparent solution	Solubility testing
pH (1 g/100 mL, H ₂ O, 25°C)	7.0-9.0	pH detection
Potency (Anhydrous)	≥ 750 u/mg	"Chinese Pharmacopoeia 2020"
Sulfate	23.0%-26.0%	"Chinese Pharmacopoeia 2020"
Loss on Drying	≤ 3.0%	Halogen moisture tester detection
Identification Reaction	Blue purple color	"Chinese Pharmacopoeia 2020"
Biological Performance Testing	Resistance testing for Escherichia coli, 5 µg/mL has inhibitory effect on Escherichia coli.	

Data

Biological Performance Test Resistance to Escherichia coli, 5 µg/mL has inhibitory effect on E.coli:



03 Application

- 1 Inhibition of bacteria and mycoplasma.
- 2 Control of bacterial contamination in tissues and cell culture.
- 3 Create an in vivo sterile environment model.
- 4 Screening bacterial clones and transformation experiments.

04 Case Study

01

Bacteriostatic test (5 mg/kg)

Source: Effect of induced synovial inflammation on pharmacokinetics and synovial concentration of sodium ampicillin and kanamycin sulfate after systemic administration in ponies (DOI: 10.1111/j.1365-2885)

02

Bacterial contamination control in cell culture (50 µg/mL)

Source: Systematic screening of optimal signal peptides for secretory production of heterologous proteins in bacillus subtilis (DOI: 10.1021/acs.jafc.8b04183)

03

Screening of the cloning vector (100 µg/mL)

Source: Maltodextrin-binding protein as a key factor in Cronobacter sakazakii survival under desiccation stress (DOI: 10.1016/j.foodres.2023.113871)

05 Related Products

Catalog	Product Name	Catalog	Product Name
K8020	Resistomycin	L2030	LB Agar Plate (with 50 µg/mL Kanamycin)
K1030	Kanamycin Solution (100 mg/mL)	LA4660	Clostridium Welchii Agar Base with Kanamycin

Coomassie Brilliant Blue G-250 (Cat.No C8420)

01 Product Description

Coomassie Brilliant Blue G-250 is a triphenylmethane dye that contains hydrophobic and negatively charged groups in its molecular structure. It can specifically bind with hydrophobic and positively charged groups (especially arginine) from proteins in alkaline environments. It is commonly used in molecular biology for protein coloration, quantitative detection. It is also still a safe and highly selective P2x7R antagonist, and it is expected to inactivate NLRP3 inflammasome.

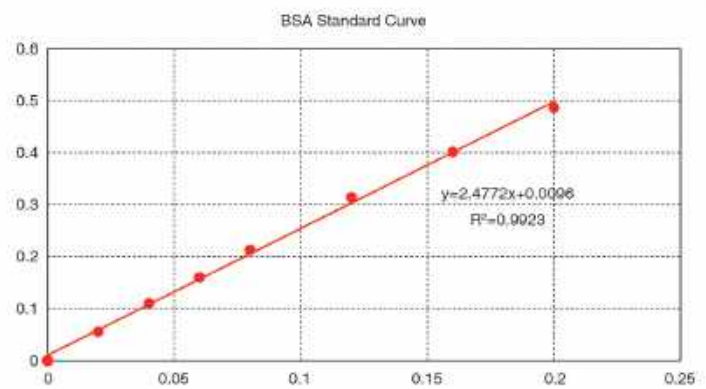
02 Quality Control

Test	Specification	Test method
Appearance	Dark blue powder	Visual inspection
Dye Content	≥ 50%	HPLC
Solubility (1 mg/mL, MeOH)	Dark blue solution	Solubility testing
UV Absorption Peak	642 nm	Spectral scanning
Biological Performance Testing	Bradford Protein Assay, $R^2 > 0.99$	

Data

Biological Performance Test: The Bradford method for protein quantitation

BSA Concentration (mg/mL)	OD Value
0.2	0.487
0.16	0.401
0.12	0.314
0.08	0.213
0.06	0.160
0.04	0.110
0.02	0.056
0	0.000



03 Application

1 Quantitative determination of proteins.

2 Gel electrophoresis staining.

04 Case Study

01

Quantitative protein determination

Source: Single-virus tracking with quantum dots in live cells. Nat Protoc (DOI: 10.1038/s41596-022-00775-7)

02

Gel electrophoresis staining

Source: Pueraria protein extract inhibits melanogenesis and promotes melanoma cell apoptosis through the regulation of MITF and mitochondrial-related pathways (DOI: 10.3892/mmr.2023.12951)

05 Related Products

Catalog	Product Name	Catalog	Product Name
C8420	Serva Blue G	PC0010	Bradford Protein Assay Kit
P1300	Coomassie Brilliant Blue Fast Staining Solution	PC0015	5x Coomassie Brilliant Blue G250 (Protein Quantitative Analysis)

Lipopolysaccharides (LPS) (Cat.No L8880)

01 Product Description

LPS is an important outer membrane component of Gram negative bacteria, which has a significant impact on the survival and pathogenicity of bacteria. Its complete structure includes hydrophobic lipid A, hydrophilic core polysaccharide chain, and a specific O-antigen oligosaccharide side chain. LPS has characteristics such as dose dependence and serotype specificity. Lipopolysaccharides express their effects through TLR4 present in the target cell membrane and play an important role in natural immunity by activating inflammation related proteins.

02 Quality Control

Test	Specification	Test method
Appearance	White or off white lyophilized powder	Visual inspection
Solubility (5 mg/mL H ₂ O)	Colorless transparent solution	Solubility testing
Polency	≥ 500,000 EU/mg	
Protein Content	≤ 3.0%	Lowry-TCA
Performance Testing	Inducing RAW264.7 cells and mouse inflammation model, Detection of significant increase in inflammatory cytokine IL-6	

Data

Biological Performance Testing:

1. Induced inflammatory response in RAW264.7 cells: RAW264.7 cells were treated with different concentrations of lipopolysaccharide for 24 hours, and the cells showed a differentiated state.



0 ng/mL LPS



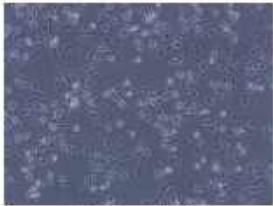
50 ng/mL LPS



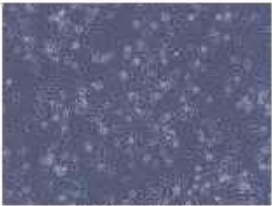
100 ng/mL LPS



500 ng/mL LPS

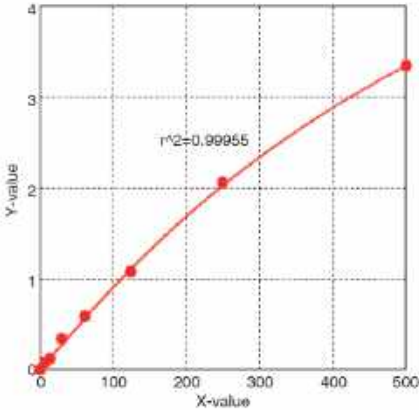


1000 ng/mL LPS



5000 ng/mL LPS

2. Induction of inflammatory reaction in mice: After taking the serum of mice 1 hour after the injection of 20 mg/kg of LPS to detect the content of IL-6, it was found that the serum content of IL-6 in mice was significantly increased 1 hour after the injection.



Standard Curve (pg/mL)	0	7.813	15.625	31.25	62.5	125	250	500
Corrected OD Value	0	0.07	0.124	0.335	0.58	1.079	2.052	3.337

Sample Number	OD	Adjusted Value	Calculated Value	Dilution Ratio	Concentration (pg/mL)
PBS	0.126	0.014	1.177	4	4.710
LPS	1.232	1.120	125.384	20	2507.689

03 Application

1 Immune stimulation, induction of inflammatory response.

2 For kidney injury, lung injury and inflammatory modeling.

3 Cell differentiation: Induce the differentiation of other macrophages, such as RAW264.7 cells

04 Case Study

01

LPS-induced systemic inflammatory response in rats (1-4 days, 1 mg/kg)

Source: In situ activation of flexible magnetoelectric membrane enhances bone defect repair (DOI: 10.1038/s41467-023-39744-3)

02

LPS induces elevated levels of RAW264.7 pro-inflammatory cytokines (100 ng/mL, 4 h)

Source: Biased allosteric activation of ketone body receptor HCAR2 suppresses inflammation (DOI: 10.1016/j.molcel.2023.07.030)

03

For the induced mouse lung injury model (800 µg/50 µL)

Source: Genetic fate-mapping reveals surface accumulation but not deep organ invasion of pleural and peritoneal cavity macrophages following injury (DOI: 10.1038/s41467-021-23197-7)

05 Related Products

Catalog	Product Name	Catalog	Product Name
L8880	Lipopolysaccharide (LPS)	L8850	FITC-Lipopolysaccharides (E.coli 055: B5)
L8851	Sterile LPS (E.coli 055: B5)	L8800	Lipopolysaccharides (Proteus bacillus Vulgaris)
L8831	Lipopolysaccharides (E.coli 0111: B4)	L7370	Lipopolysaccharides (Akkermansia Muciniphila)
L8810	Lipopolysaccharides (Porphyromonas Gingivalis)	L8610	Lipopolysaccharides (Serotype Salmonella Enteritidis)
L8840	Lipopolysaccharides (Klebsiella Pneumoniae ATCC 15380)	L9190	Lipopolysaccharides (LPS Pseudomonas Aeruginosa)

Hoechst 33258 Fluorescent Dye (Cat.No B8030)

01 Product Description

Hoechst 33258 is a bright blue fluorescent compound with cell permeability and head-to-tail benzimidazole structure. It can bind to small grooves of dsDNA and preferentially bind to sequences rich in adenine and thymine to form Hoechst33258-nucleic acid complex. The maximum excitation and emission wavelengths of the complex are Ex/Em = 352/461 nm, which is commonly used in cell line studies in vitro.

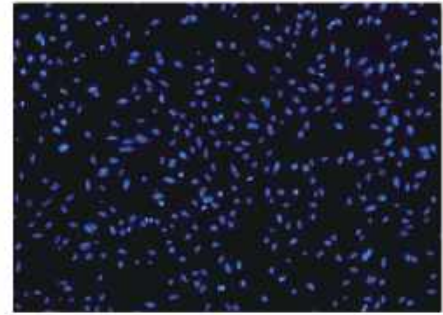
02 Quality Control

Test	Specification	Test method
Appearance	Yellow or green powder	Visual inspection
Solubility (10 mg/mL, H ₂ O)	Yellow or green clear liquid	Solubility testing
Purity	≥ 98.0%	TLC
Biological Performance Testing	The nucleus is stained blue	Cells were stained for fluorescence

Biological Performance Test Viable cells were stained and the nucleus was stained as blue fluorescent.



Light Field



Blue Fluorescence

03 Application

- 1 Tissue/cell nucleus localization.
- 2 Detection for cell apoptosis.
- 3 Staining for DNA, chromosomes and nucleic acids.

04 Case Study

01

RAW264.7 Nuclear staining

Source: Biodegradable ICG-Conjugated Germanium Nanoparticles for In Vivo Near-Infrared Dual-Modality Imaging and Photothermal Therapy (DOI: 10.1002/advs.202307441)

02

HK-2 Nucleus re-staining, localization

Source: Artesunate-Nanoliposome-TPP, a Novel Drug Delivery System That Targets the Mitochondria, Attenuates Cisplatin-Induced Acute Kidney Injury by Suppressing Oxidative Stress and Inflammatory Effects (DOI: 10.2147/IJN.S444076)

05 Related Products

Catalog	Product Name	Catalog	Product Name
C0021	Hoechst 33258 Stain Solution (1 mg/mL)	G3680	Cell Apoptosis Analysis Kit (Hoechst Method)
C0020	Hoechst 33258 Stain Solution		

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