

Host Cell Protein Products

Annexin A5

Annexin A5 is an anticoagulant protein acting as an indirect inhibitor of the thromboplastin-specific complex.

Catalog Number	Description	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0425-01-Z	Purified CHO Annexin A5 Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025 mg
E-65NX5	Hamster CHO Annexin A5 ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate
CNX5-65ALY-Z	anti-CHO Annexin A5 Antibody	Chicken	Unconjugated	Primary Antibody	0.1 mg

Beta 2-Microglobulin

Beta 2-Microglobulin is a component of the major histocompatibility complex involving the presentation of peptide antigens to the immune system.

Catalog Number	Description	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0041-01-Z	Purified CHO Beta 2-Microglobulin Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025 mg
E-65B2	Hamster CHO Beta 2-Microglobulin (B2M) ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate
CB2-65ALY-Z	anti-CHO B2M Antibody	Chicken	Unconjugated	Primary Antibody	0.1 mg

C-C Motif Chemokine

C-C Motif Chemokines are a family of secreted signaling proteins that direct immune cell trafficking and mediate inflammation.

Catalog Number	Description	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0447-LY	Purified CHO C-C Chemokine Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025 mg
E-65CC2	Hamster CHO C-C Motif Chemokine ELISA kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate
GCC2-65ALY	anti-CHO C-C Motif Chemokine Antibody	Goat	Unconjugated	Primary Antibody	0.5mg/0.1 mg

Cathepsin B

Cathepsin B is a lysosomal cysteine protease recognized for its crucial role in intracellular protein degradation.

Catalog Number	Description	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0440-01-Z	Purified CHO Cathepsin B Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025 mg
E-65CTB	Hamster CHO Cathepsin B ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate

Cathepsin D

Cathepsin D is a lysosomal aspartic protease involved in intracellular protein processing and turnover.

Catalog Number	Description	Species Reactivity or Antibody Host	Format	Product Type	Quantity
E-65CTD	Hamster CHO Cathepsin D ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate

Cathepsin L

Cathepsin L is a lysosomal cysteine protease involved in intracellular protein degradation, antigen processing, and turnover.

Catalog Number	Description	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0439-01-Z	Purified CHO Cathepsin L Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025mg
E-65CTL	Hamster CHO Cathepsin L ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate

Cathepsin Z

Cathepsin Z is a lysosomal cysteine protease involved in protein turnover, cell adhesion, and cytoskeletal regulation.

Catalog Number	Description	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0441-LY	Purified CHO Cathepsin Z Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025mg
E-65CTZ	Hamster CHO Cathepsin Z ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate

Clusterin

Clusterin plays key roles in protein homeostasis/proteostasis, and the modulation of pro-survival signaling networks.

Catalog Number	Description	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0075-LY	Purified CHO Clusterin Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025 mg
E-65CLS	Hamster CHO Clusterin ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate
CCLS-65ALY-Z	anti-CHO Clusterin Antibody	Chicken	Unconjugated	Primary Antibody	0.1 mg

Glutathione S-transferase Pi (GSTp)

Glutathione S-transferase Pi (GSTp) is a metabolic enzyme that facilitates metabolite detoxification and antioxidation. GSTp reduces efficacy of chemotherapy drugs and inhibits tumor-cell apoptosis.

Catalog Number	Description	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0337	Purified CHO GSTp Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025 mg
E-65GSTP	Hamster CHO GSTp ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate
MGSTP-65A-2E6-Z	anti-CHO GSTp Antibody	Mouse	Unconjugated	Primary Antibody	0.1 mg

GTP-binding nuclear protein (RAN)

GTP-binding nuclear protein (RAN) maintains nuclear structure, protein import, mRNA processing and export, and cell cycle regulation.

Catalog Number	Target	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0127-01-Z	Purified CHO RAN Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025 mg
E-65RAN	Hamster CHO RAN ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate
GRAN-65ALY	anti-CHO RAN Protein	Goat	Unconjugated	Primary Antibody	0.5 mg/0.1 mg

Legumain

Legumain is a cysteine protease which can cause hydrolysis of proteins and small molecule substrates at -Asn-l-Xaa- bonds.

Catalog Number	Target	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0423-LY	Purified CHO Legumain Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025 mg
E-65LGM	Hamster CHO Legumain ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate
CLGM-65ALY	anti-CHO Legumain Antibody	Chicken	Unconjugated	Primary Antibody	0.5 mg/0.1 mg

Lysosomal Acid Lipase (LAL)

Lysosomal Acid Lipase is an essential enzyme that breaks down cholesteryl esters and triglycerides in the lysosomes.

Catalog Number	Target	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0442-01-Z	Purified CHO LAL Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025mg
E-65LAL	Hamster CHO LAL ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate

Lysosomal protective protein (CTSA)

Lysosomal protective protein (CTSA) is essential for both the activity and stability of beta-galactosidase and neuraminidase.

Catalog Number	Description	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0129-LY	Purified CHO CTSA Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025 mg
E-65CTA	Hamster CHO CTSA ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate
GCTA-65ALY	anti-CHO CTSA Protein	Goat	Unconjugated	Primary Antibody	0.5 mg/0.1 mg

Lysosomal Phospholipase A2 (LPLA2)

Very low levels of Lysosomal Phospholipase A2 (LPLA2) will degrade polysorbate which impacts the stability of Polysorbate 20 and Polysorbate 80.

Catalog Number	Description	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0128-01-Z	Purified CHO LPLA2 Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025 mg
E-65LPLA	Hamster CHO LPLA2 ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate
GLPLA-65ALY	anti-CHO LPLA2 Protein	Goat	Unconjugated	Primary Antibody	0.5 mg/0.1 mg

Matrix metalloproteinase-19 (MMP-19)

Matrix metalloproteinase-19 (MMP-19) degrades extracellular matrix proteins including aggrecan and cartilage oligomeric matrix.

Catalog Number	Description	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0424-01-Z	Purified CHO MMP-19 Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025 mg
E-65MP19	Hamster CHO Matrix metalloproteinase-19 (MMP-19) ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate
CMP19-65ALY-Z	anti-CHO MMP-19 Antibody	Chicken	Unconjugated	Primary Antibody	0.1 mg

Nidogen-1

Nidogen-1 is a sulfated glycoprotein, widely distributed in basement membranes and tightly associated with laminin, collagen IV, and fibronectin involving cell extracellular matrix interactions.

Catalog Number	Description	Species Reactivity or Antibody Host	Format	Product Type	Quantity
E-65NDN	Hamster CHO Nidogen-1 ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate
CNDN-65ALY-Z	anti-CHO Nidogen-1 Antibody	Chicken	Unconjugated	Primary Antibody	0.1 mg

Nucleobindin-2 (NUCB2)

Nucleobindin-2 (NUCB2) is a precursor of Nesfatin-1, which regulates food intake and energy homeostasis, and can have a potential role in modulating blood pressure.

Catalog Number	Description	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0130-01-Z	Purified CHO NUCB2 Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025 mg
E-65NUC	Hamster CHO NUCB2 ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate
GNUC-65ALY	anti-CHO NUCB2 Protein	Goat	Unconjugated	Primary Antibody	0.5 mg/0.1 mg

Peroxiredoxin-1

Peroxiredoxin-1 is a cytosolic antioxidant enzyme that detoxifies hydrogen peroxide and regulates redox signaling.

Catalog Number	Description	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0379-01-Z	Purified CHO Peroxiredoxin-1 Protein	CHO	Unconjugated	Protein Standard	0.025 mg
E-65PDX	Hamster CHO Peroxiredoxin-1 ELISA kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate
GPDX-65ALY	anti-CHO Peroxiredoxin-1 Antibody	Goat	Unconjugated	Primary Antibody	0.5mg

Phospholipase B-Like2 (PLBL2)

Phospholipase B-Like 2 (PLBL2) binds to humanized monoclonal antibodies, particularly those of the IgG4 isotype, which causes an immune response.

Catalog Number	Description	Species Reactivity or Antibody Host	Format	Product Type	Quantity
AG65-0324-LY	Purified CHO PLBL2 Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025 mg
AG65-0365	Purified CHO PLBL2 Protein	CHO (Recombinant)	Unconjugated	Protein Standard	0.025 mg
E-65PLB	Hamster CHO PLBL2 ELISA Kit	Hamster	Sandwich ELISA	ELISA Kit	96 well plate
GPLB-65ALY	anti-CHO PLBL2	Goat	Unconjugated	Primary Antibody	0.5 mg
GPLB-65B	anti-CHO PLBL2	Goat	Biotin Conjugated	Primary Antibody	0.5 mg/0.1 mg
MPLB-65ALY-4D5	anti-CHO PLBL2	Mouse	Unconjugated	Primary Antibody	0.5 mg/0.1 mg

ICL

R&D to IVD

Our ELISA Kits

ICL was among the first to commercialize ELISA kits that use highly specific and sensitive antibodies developed in our lab to detect specific CHO host cell proteins (HCP) like PLBL2 and NUCB2. HCP may co-purify and contaminate monoclonal antibodies cultured in CHO cells, but ELISA kits make it fast and simple to identify these variables before they affect your research. Reducing or minimizing HCP impurities is mandated by federal guidelines and is crucial in the development and manufacturing of recombinant biotherapeutics, which are key treatment options for a wide range of illnesses.

Reducing CHO Protein Impurities

Many approved therapeutic glycoproteins are manufactured in Chinese Hamster Ovary (CHO) cells. While CHO cells are one of the most genetically engineered host cell systems for recombinant protein production, the contamination of CHO host cell proteins can adversely affect their use. Without addressing HCP impurities, there is an increased risk of contaminating research and even triggering an immune response upon administration.

ICL's high-quality antibodies and ELISA kits target specific CHO cells to avoid compromising patient safety and ensure more desirable clinical outcomes. Conducting a comprehensive risk assessment of host cell protein levels in CHO cell-based protein production is essential, and research or IVD teams can easily mitigate those risks by using a reliable, trusted supplier of biological reagents.

Why Choose ICL?

With proven expertise in producing the highest quality primary and secondary antibodies, proteins, ELISA kits, and reference standards, ICL makes it easy to improve research outcomes and streamline supply chains.

Our customers include many of the world's leading IVD manufacturers, pharmaceutical companies, and research institutions, who rely on us for both off-the-shelf and custom products at varying scales.

All our products are manufactured in the USA under rigorous process control and are backed by rapid customer service to keep your projects on schedule.

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