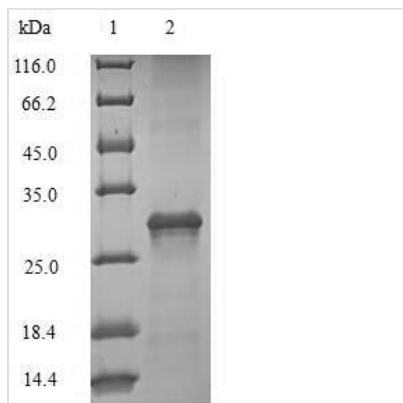


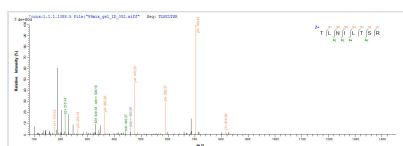


# Recombinant Sheep Interleukin-4 (IL4)

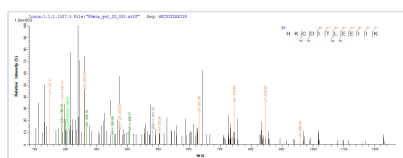
<b>Product Code</b>	CSB-EP011659SH
<b>Relevance</b>	Participates in at least several B-cell activation processes as well as of other cell types. It is a costimulator of DNA-synthesis. It induces the expression of class II MHC molecules on resting B-cells. It enhances both secretion and cell surface expression of IgE and IgG1. It also regulates the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes. Positively regulates IL31RA expression in macrophages.
<b>Abbreviation</b>	Recombinant Sheep IL4 protein
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	P30368
<b>Alias</b>	B-cell stimulatory factor 1
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Ovis aries (Sheep)
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Sequence</b>	HKCDITLEEIIKTLNILTSRKNSCMELPVADVFAAPKNATEKETFCRAGIELRRIY RSHMCLNKFLGGLDRNLSSLASKTCSVNEAKTSTSTLRDLLERLKTIMREKYSK C
<b>Research Area</b>	Immunology
<b>Source</b>	E.coli
<b>Target Names</b>	IL4
<b>Protein Names</b>	Recommended name: Interleukin-4 Short name= IL-4 Alternative name(s): B-cell stimulatory factor 1 Short name= BSF-1 Lymphocyte stimulatory factor 1
<b>Expression Region</b>	25-135aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	N-terminal 10XHis-B2M-tagged and C-terminal Myc-tagged
<b>Mol. Weight</b>	29.6kDa
<b>Protein Length</b>	Full Length of Mature Protein
<b>Image</b>	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP011659SH could indicate that this peptide derived from E.coli-expressed Ovis aries (Sheep) IL4.



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## Description

Inserting the gene encoding the Ovis aries (Sheep) IL4 protein (25-135aa) into a plasmid vector results in the creation of recombinant plasmid, which is introduced into e.coli cells. e.coli cells that can survive in the presence of a specific antibiotic are selected, indicating successful uptake of the recombinant plasmid. The e.coli cells containing the recombinant plasmid are cultured under conditions promoting the expression of the gene of interest. A N-terminal 10XHis-B2M tag and C-terminal Myc tag is linked to the protein. After expression, affinity purification is used to isolate and purify the recombinant Ovis aries (Sheep) IL4 protein from the cell lysate. Denaturing SDS-PAGE is then applied to resolve the resulting recombinant Ovis aries (Sheep) IL4 protein, revealing a purity level exceeding 90%.

## Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

## Shelf Life

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