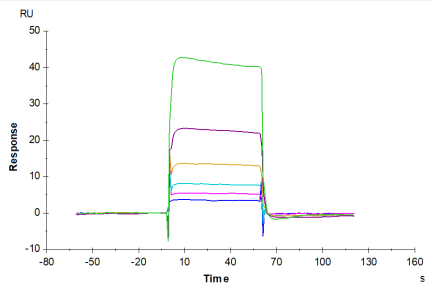
Bioactive CellTx™ HuPro®

CD80 (Human) Recombinant Protein

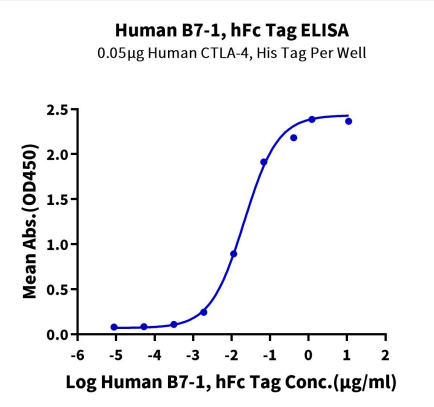
Catalog # P10076 Size 100 ug

Applications



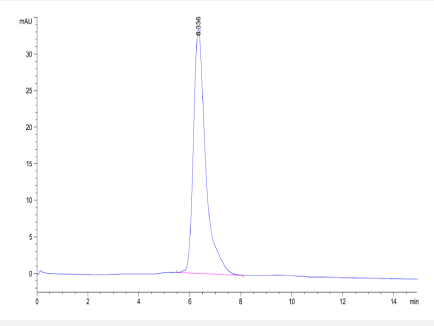
Surface Plasmon Resonance

Human B7-1, hFc Tag captured on CM5 Chip via Protein A can bind Human/Cynomolgus/Rhesus macaque CD28, His-Avi Tag with an affinity constant of 43.61 uM as determined in SPR assay (Biacore T200).



ELISA

Immobilized Human CTLA-4, His Tag at 0.5 ug/ml (100 ul/Well) on the plate. Dose response curve for Human B7-1, hFc Tag with the EC_{50} of 21.4 ng/ml determined by ELISA (QC Test).



SEC-HPLC

The purity of Human B7-1 is greater than 95% as determined by SEC-HPLC.

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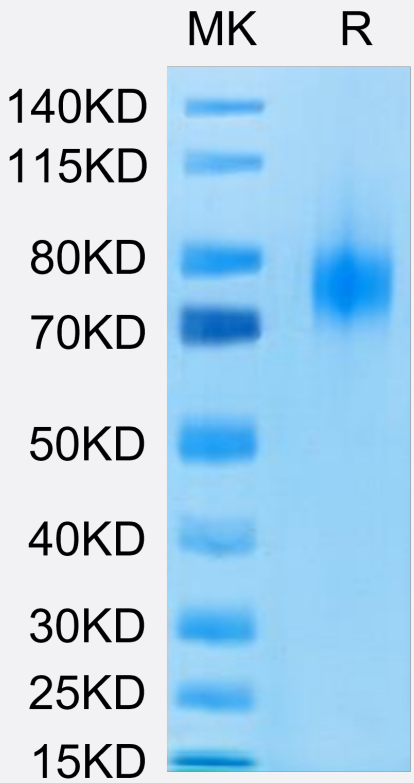

Tris-Bis PAGE

Human B7-1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

Specification

Product Description	Human CD80 (P33681-1, Val35-Asn242) partial recombinant protein with hFc tag at C-terminus expressed in HEK293 cells.
Sequence	Val35-Asn242
Host	Human
Theoretical MW (kDa)	50.5
Form	Lyophilized
Preparation Method	Mammalian cell (HEK293) expression system
Purity	> 95% as determined by Tris-Bis PAGE;> 95% as determined by HPLC
Endotoxin Level	< 1 EU per 1 ug of protein (determined by LAL method)
Quality Control Testing	ELISA and SEC-HPLC ELISA Immobilized Human CTLA-4, His Tag at 0.5 ug/ml (100 ul/Well) on the plate. Dose response curve for Human B7-1, hFc Tag with the EC_{50} of 21.4 ng/ml determined by ELISA (QC Test). SEC-HPLC The purity of Human B7-1 is greater than 95% as determined by SEC-HPLC. Tris-Bis PAGE Human B7-1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

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Recommend Usage	Biological Activity ELISA SEC-HPLC SPR Tris-Bis PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from filtered solution in PBS, pH 7.4 (5% trehalose).
Storage Instruction	After reconstitution with deionized water to a final concentration more than 100 ug/ml, store at 4°C for 1 week. For long term storage, store at -80°C for 1 year. Aliquot to avoid repeated freezing and thawing.

Applications

- Functional Study
- Enzyme-linked Immunoabsorbent Assay
- Surface Plasmon Resonance

  Human B7-1, hFc Tag captured on CM5 Chip via Protein A can bind Human/Cynomolgus/Rhesus macaque CD28, His-Avi Tag with an affinity constant of 43.61 uM as determined in SPR assay (Biacore T200).

Gene Info — CD80

Entrez GeneID	941
Protein Accession#	P33681-1
Gene Name	CD80
Gene Alias	CD28LG, CD28LG1, LAB7
Gene Description	CD80 molecule
Omim ID	112203
Gene Ontology	Hyperlink
Gene Summary	The B-lymphocyte activation antigen B7-1 (formerly referred to as B7) provides regulatory signals for T lymphocytes as a consequence of binding to the CD28 (MIM 186760) and CTLA4 (MIM 123 890) ligands of T cells.[supplied by OMIM
Other Designations	B-lymphocyte activation antigen B7|CD80 antigen|CD80 antigen (CD28 antigen ligand 1, B7-1 an tigen)|costimulatory factor CD80|costimulatory molecule variant IgV-CD80

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Pathway

- Allograft rejection
- Autoimmune thyroid disease
- Cell adhesion molecules (CAMs)
- Graft-versus-host disease
- Systemic lupus erythematosus
- Toll-like receptor signaling pathway
- Type I diabetes mellitus

Disease

- Arthritis
- Asthma
- Bronchiolitis
- Carcinoma
- Celiac Disease
- Disease Progression
- Genetic Predisposition to Disease
- Hepatitis C
- Infant
- Liver Neoplasms
- Lung Neoplasms
- Lupus Erythematosus
- Multiple Sclerosis
- Papillomavirus Infections
- Pulmonary Disease

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- Respiratory Syncytial Virus Infections
- Sarcoidosis
- Urinary Bladder Neoplasms
- Uterine Cervical Neoplasms
- Viremia
- Werner syndrome

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