

# Human B7-2/CD86 Protein, Ultra Low Endotoxin

Cat. No. B72-HM286-UL

## Description

<b>Source</b>	Recombinant Human B7-2/CD86 Protein is expressed from HEK293 with hFc (IgG1) tag at the C-Terminus. It contains Leu26-Pro247.
<b>Accession</b>	P42081-1
<b>Molecular Weight</b>	The protein has a predicted MW of 52 kDa. Due to glycosylation, the protein migrates to 75-90 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.01 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

B7-1 and B7-2 are homologous costimulatory ligands expressed on the surface of antigen presenting cells (APCs). Binding of these molecules to the T cell costimulatory receptors, CD28 and CTLA-4, is essential for the activation and regulation of T cell immunity. B7-1 and B7-2 do not form hetero-oligomers, underscoring the biological relevance of dimeric and monomeric state of B7-1 and B7-2, respectively.

## Assay Data

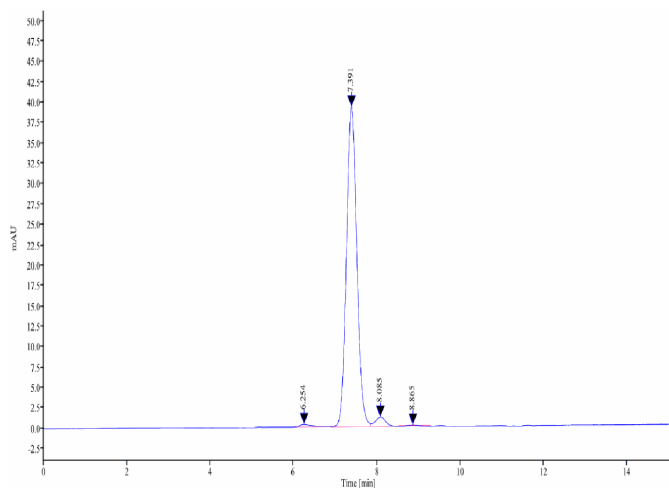
### Bis-Tris PAGE



Human B7-2 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

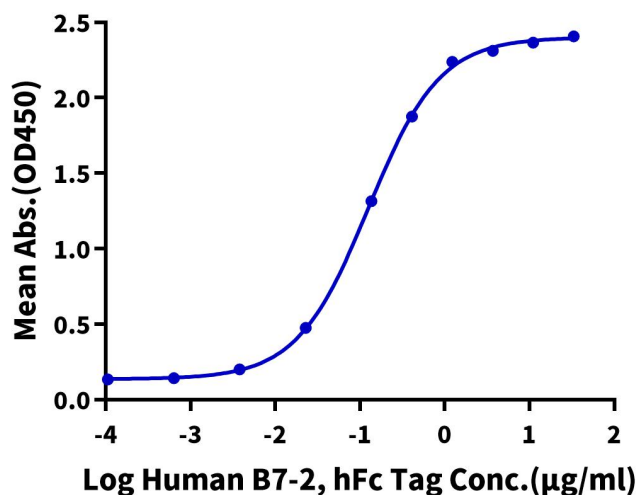
Assay Data



The purity of Human B7-2 is greater than 95% as determined by SEC-HPLC.

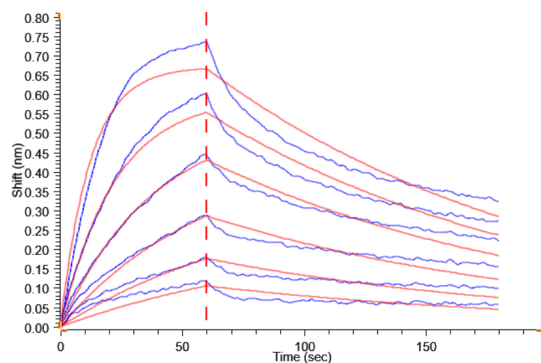
ELISA Data

**Human B7-2, hFc Tag ELISA**  
0.5µg Human CTLA-4, His Tag Per Well



Immobilized Human CTLA-4, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Human B7-2, hFc Tag with the EC50 of 125.7ng/ml determined by ELISA.

BLI Data



Loaded Human CTLA-4, His Tag on Anti-His-Biosensor can bind Human B7-2, hFc Tag with an affinity constant of 9.35 nM as determined in BLI assay .