

# Human B7-H7/HHLA2 Protein

Cat. No. BH7-HM277

## Description

<b>Source</b>	Recombinant Human B7-H7/HHLA2 Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Ile23-Asn344.
<b>Accession</b>	Q9UM44-1
<b>Molecular Weight</b>	The protein has a predicted MW of 63.7 kDa. Due to glycosylation, the protein migrates to 78-100 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per ug by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

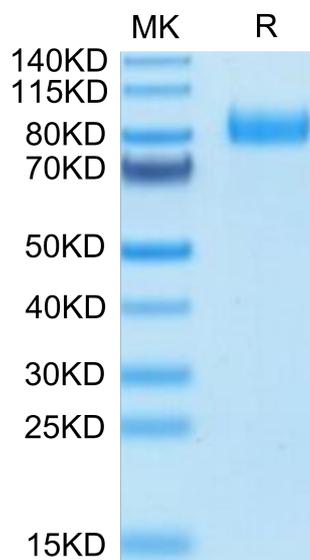
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<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-H7, also known as HHLA2 (HERV-H LTR-associating 2), is a member of the B7 family of immune regulatory proteins. Through interaction with TMIGD2, costimulates T-cells in the context of TCR-mediated activation. Enhances T-cell proliferation and cytokine production via an AKT-dependent signaling cascade.

## Assay Data

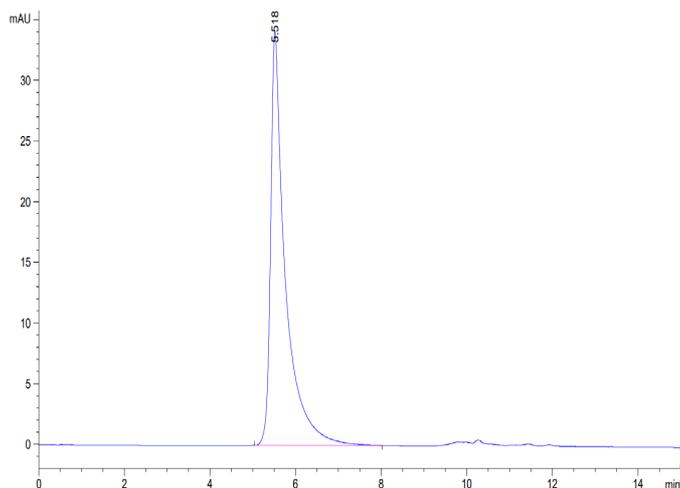
### Bis-Tris PAGE



Human B7-H7 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

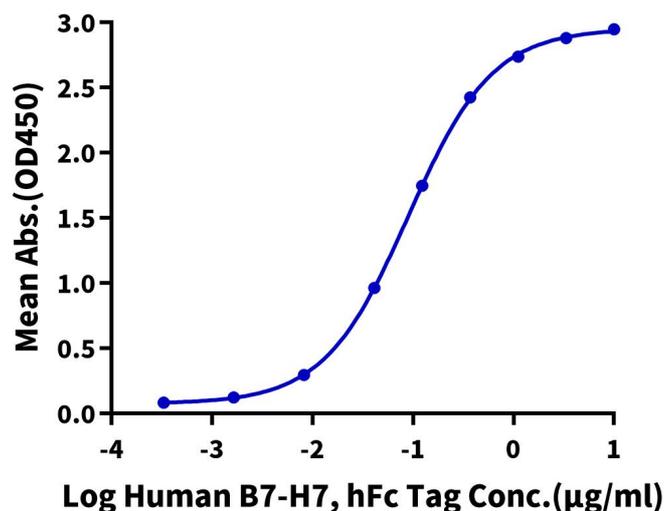
Assay Data



The purity of Human B7-H7 is greater than 95% as determined by SEC-HPLC.

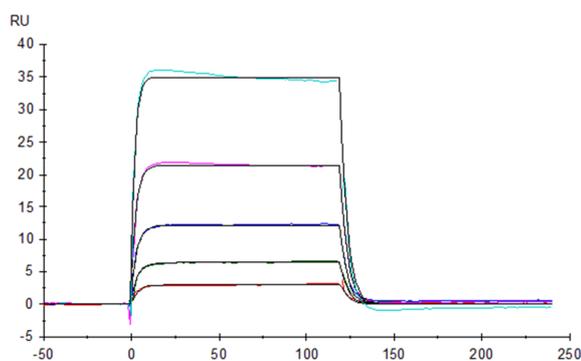
ELISA Data

**Human B7-H7, hFc Tag ELISA**  
0.5µg Human CD28H, His Tag Per Well



Immobilized Human CD28H, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Human B7-H7, hFc Tag with the EC50 of 90.0ng/ml determined by ELISA (QC Test).

SPR Data



Human B7-H7, hFc Tag captured on CM5 Chip via Protein A can bind Human KIR3DL3, His Tag with an affinity constant of 334 nM as determined in SPR assay (Biacore T200).