

# Human CD1A Protein

Cat. No. CDA-HM11A



## Description

<b>Source</b>	Recombinant Human CD1A Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Asp19-Val300.
<b>Accession</b>	NP_001754.2
<b>Molecular Weight</b>	The protein has a predicted MW of 33.3 kDa. Due to glycosylation, the protein migrates to 48-53 kDa and 13-14 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

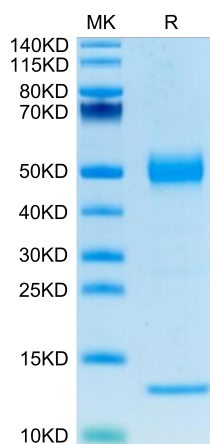
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein 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

CD1 proteins are a family of major histocompatibility complex (MHC) class I-like antigen-presenting molecules that present lipids to T cells. The cytoplasmic tails (CTs) of all human CD1 isoforms, with the exception of CD1a, contain tyrosine-based sorting motifs, responsible for the internalization of proteins by the clathrin-mediated pathway. CD1a closer to MHC class I in its trafficking and potential antigen-loading compartments among CD1 isoforms.

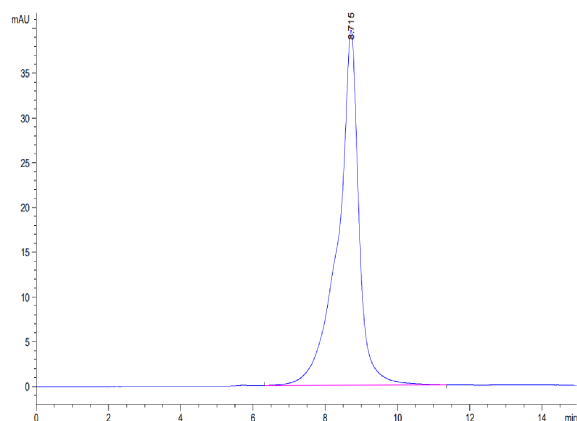
## Assay Data

### Bis-Tris PAGE



Human CD1A on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



The purity of Human CD1A is greater than 95% as determined by SEC-HPLC.