

Datasheet for ABIN7548297

CD74 Protein (AA 1-296) (His tag)





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Quantity:	1 mg
Target:	CD74
Protein Characteristics:	AA 1-296
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CD74 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant CD74 Protein expressed in mammalian cells.	
Sequence:	MHRRRSRSCR EDQKPVMDDQ RDLISNNEQL PMLGRRPGAP ESKCSRGALY TGFSILVTLL	
	LAGQATTAYF LYQQQGRLDK LTVTSQNLQL ENLRMKLPKP PKPVSKMRMA TPLLMQALPM	
	GALPQGPMQN ATKYGNMTED HVMHLLQNAD PLKVYPPLKG SFPENLRHLK NTMETIDWKV	
	FESWMHHWLL FEMSRHSLEQ KPTDAPPKVL TKCQEEVSHI PAVHPGSFRP KCDENGNYLP	
	LQCYGSIGYC WCVFPNGTEV PNTRSRGHHN CSESLELEDP SSGLGVTKQD LGPVPM Sequence	
	without tag. The proposed Purification-Tag is based on experiences with the expression	
	system, a different complexity of the protein could make another tag necessary. In case you	
	have a special request, please contact us.	
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different	
	isoform, please contact us regarding an individual offer.	
Characteristics:	s: Key Benefits:	

- · Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

Target Details

Target: CD74

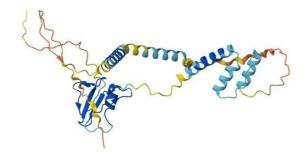
Alternative Name: CD74 (CD74 Products)

Background:

HLA class II histocompatibility antigen gamma chain (HLA-DR antigens-associated invariant chain) (Ia antigen-associated invariant chain) (Ii) (CD antigen CD74) [Cleaved into: Class-II-associated invariant chain peptide (CLIP)], FUNCTION: Plays a critical role in MHC class II antigen processing by stabilizing peptide-free class II alpha/beta heterodimers in a complex soon after their synthesis and directing transport of the complex from the endoplasmic reticulum to the endosomal/lysosomal system where the antigen processing and binding of antigenic peptides to MHC class II takes place. Serves as cell surface receptor for the cytokine MIF., FUNCTION: [Class-II-associated invariant chain peptide]: Binds to the peptide-binding site of MHC class II alpha/beta heterodimers forming an alpha-beta-CLIP complex, thereby preventing the loading of antigenic peptides to the MHC class II complex until its release by HLA-DM in the endosome. {ECO:0000269|PubMed:1448172}-, FUNCTION: [Isoform p41]: Stabilizes the conformation of mature CTSL by binding to its active site and serving as a chaperone to help maintain a pool of mature enzyme in endocytic compartments and extracellular space of antigen-presenting cells (APCs). Has antiviral activity by stymieing the

Target Details

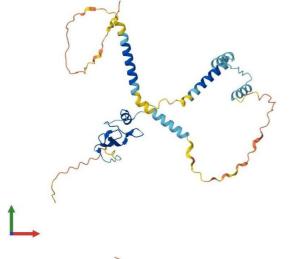
	endosomal entry of Ebola virus and coronaviruses, including SARS-CoV-2 (PubMed:32855215). Disrupts cathepsin-mediated Ebola virus glycoprotein processing, which prevents viral fusion and entry. This antiviral activity is specific to p41 isoform (PubMed:32855215). {ECO:0000250 UniProtKB:P04441, ECO:0000269 PubMed:32855215}.	
Molecular Weight:	33.5 kDa	
UniProt:	P04233	
Pathways:	Positive Regulation of Immune Effector Process, Production of Molecular Mediator of Immune Response, Negative Regulation of intrinsic apoptotic Signaling, Cancer Immune Checkpoints	
Application Details		
Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.	
Restrictions:	For Research Use only	
Handling		
Format:	Liquid	
Buffer:	The buffer composition is at the discretion of the manufacturer.	
Handling Advice:	Avoid repeated freeze-thaw cycles.	
Storage:	-80 °C	
Storage Comment:	Store at -80°C.	
Expiry Date:	12 months	



Protein Structure

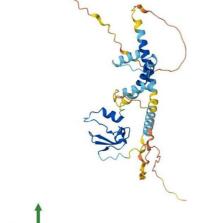
Image 1. AlphaFold protein structure predicition of Human Recombinant CD74 Protein, UniprotID P04233





Protein Structure

Image 2. AlphaFold protein structure predicition of Human Recombinant CD74 Protein, UniprotID P04233



Protein Structure

Image 3. AlphaFold protein structure predicition of Human Recombinant CD74 Protein, UniprotID P04233