

# Datasheet for ABIN7562401 KLRK1 Protein (AA 1-232) (His tag)

## 3 Images



#### Overview

Quantity:	1 mg
Target:	KLRK1
Protein Characteristics:	AA 1-232
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This KLRK1 protein is labelled with His tag.

#### **Product Details**

Troduct Details	
Purpose:	Made-to-order recombinant Klrk1 Protein expressed in mammalian cells.
Sequence:	MALIRDRKSH HSEMSKCHNY DLKPAKWDTS QEQQKQRLAL TTSQPGENGI IRGRYPIEKL
	KISPMFVVRV LAIALAIRFT LNTLMWLAIF KETFQPVLCN KEVPVSSREG YCGPCPNNWI
	CHRNNCYQFF NEEKTWNQSQ ASCLSQNSSL LKIYSKEEQD FLKLVKSYHW MGLVQIPANG
	SWQWEDGSSL SYNQLTLVEI PKGSCAVYGS SFKAYTEDCA NLNTYICMKR AV <b>Sequence</b>
	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:	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**

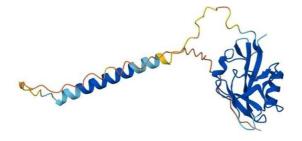
Target:	KLRK1
Alternative Name:	Klrk1 (KLRK1 Products)

Background:

NKG2-D type II integral membrane protein (Killer cell lectin-like receptor subfamily K member 1) (NK cell receptor D) (NKG2-D-activating NK receptor) (CD antigen CD314),FUNCTION: Functions as an activating and costimulatory receptor involved in immunosurveillance upon binding to various cellular stress-inducible ligands displayed at the surface of autologous tumor cells and virus-infected cells. Provides both stimulatory and costimulatory innate immune responses on activated killer (NK) cells, leading to cytotoxic activity. Acts as a costimulatory receptor for T-cell receptor (TCR) in CD8(+) T-cell-mediated adaptive immune responses by amplifying T-cell activation. Stimulates perforin-mediated elimination of ligand-expressing tumor cells. Signaling involves calcium influx, culminating in the expression of TNF-alpha. Participates in NK cell-mediated bone marrow graft rejection. May play a regulatory role in differentiation and survival of NK cells. Binds to ligands belonging to various subfamilies of MHC class I-related glycoproteins including RAET1A, RAET1B, RAET1C, RAET1D, RAET1E, H60 and MULT1. {ECO:0000269|PubMed:10894171, ECO:0000269|PubMed:11248803, ECO:0000269|PubMed:12150888, ECO:0000269|PubMed:12370332,

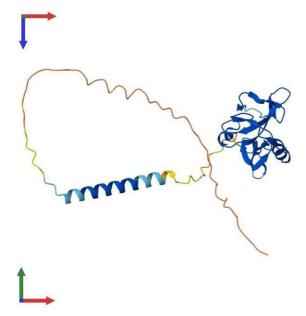
### **Target Details**

	ECO:0000269 PubMed:12426564, ECO:0000269 PubMed:12426565,
	ECO:0000269 PubMed:15189740, ECO:0000269 PubMed:16086018,
	ECO:0000269 PubMed:18394936, ECO:0000269 PubMed:19631564,
	ECO:0000269 PubMed:21898152, ECO:0000269 PubMed:23298206}.
Molecular Weight:	26.7 kDa
UniProt:	054709
Pathways:	Activation of Innate immune Response, Cellular Response to Molecule of Bacterial Origin,
	Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process
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



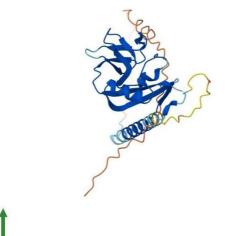
#### **Protein Structure**

**Image 1.** AlphaFold protein structure predicition of Mouse Recombinant Klrk1 Protein, UniprotID 054709



#### **Protein Structure**

Image 2. AlphaFold protein structure predicition of Mouse Recombinant Klrk1 Protein, UniprotID 054709



#### **Protein Structure**

Image 3. AlphaFold protein structure predicition of Mouse Recombinant Klrk1 Protein, UniprotID 054709