

# Datasheet for ABIN7554682 MYO1G Protein (AA 1-1018) (His tag)



# Overview

Quantity:	1 mg
Target:	MY01G
Protein Characteristics:	AA 1-1018
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MYO1G protein is labelled with His tag.

## **Product Details**

Purpose:	Custom-made recombinant MYO1G Protein expressed in mammalian cells.
Sequence:	MEDEEGPEYG KPDFVLLDQV TMEDFMRNLQ LRFEKGRIYT YIGEVLVSVN PYQELPLYGP
	EAIARYQGRE LYERPPHLYA VANAAYKAMK HRSRDTCIVI SGESGAGKTE ASKHIMQYIA
	AVTNPSQRAE VERVKDVLLK STCVLEAFGN ARTNRNHNSS RFGKYMDINF DFKGDPIGGH
	IHSYLLEKSR VLKQHVGERN FHAFYQLLRG SEDKQLHELH LERNPAVYNF THQGAGLNMT
	VHSALDSDEQ SHQAVTEAMR VIGFSPEEVE SVHRILAAIL HLGNIEFVET EEGGLQKEGL
	AVAEEALVDH VAELTATPRD LVLRSLLART VASGGRELIE KGHTAAEASY ARDACAKAVY
	QRLFEWVVNR INSVMEPRGR DPRRDGKDTV IGVLDIYGFE VFPVNSFEQF CINYCNEKLQ
	QLFIQLILKQ EQEEYEREGI TWQSVEYFNN ATIVDLVERP HRGILAVLDE ACSSAGTITD
	RIFLQTLDMH HRHHLHYTSR QLCPTDKTME FGRDFRIKHY AGDVTYSVEG FIDKNRDFLF
	QDFKRLLYNS TDPTLRAMWP DGQQDITEVT KRPLTAGTLF KNSMVALVEN LASKEPFYVR
	CIKPNEDKVA GKLDENHCRH QVAYLGLLEN VRVRRAGFAS RQPYSRFLLR YKMTCEYTWP
	NHLLGSDKAA VSALLEQHGL QGDVAFGHSK LFIRSPRTLV TLEQSRARLI PIIVLLLQKA

WRGTLARWRC RRLRAIYTIM RWFRRHKVRA HLAELQRRFQ AARQPPLYGR DLVWPLPPAV LQPFQDTCHA LFCRWRARQL VKNIPPSDMP QIKAKVAAMG ALQGLRQDWG CRRAWARDYL SSATDNPTAS SLFAQRLKTL QDKDGFGAVL FSSHVRKVNR FHKIRNRALL LTDQHLYKLD PDRQYRVMRA VPLEAVTGLS VTSGGDQLVV LHARGQDDLV VCLHRSRPPL DNRVGELVGV LAAHCQGEGR TLEVRVSDCI PLSHRGVRRL ISVEPRPEQP EPDFRCARGS FTLLWPSR 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:

#### 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:	MY01G
Alternative Name:	MY01G (MY01G Products)
Background:	Unconventional myosin-Ig [Cleaved into: Minor histocompatibility antigen HA-2 (mHag HA-2)],FUNCTION: Unconventional myosin required during immune response for detection of rare
	antigen-presenting cells by regulating T-cell migration. Unconventional myosins are actin-based

motor molecules with ATPase activity and serve in intracellular movements. Acts as a regulator of T-cell migration by generating membrane tension, enforcing cell-intrinsic meandering search, thereby enhancing detection of rare antigens during lymph-node surveillance, enabling pathogen eradication. Also required in B-cells, where it regulates different membrane/cytoskeleton-dependent processes. Involved in Fc-gamma receptor (Fc-gamma-R) phagocytosis. {ECO:0000250|UniProtKB:Q5SUA5}., FUNCTION: [Minor histocompatibility antigen HA-2]: Constitutes the minor histocompatibility antigen HA-2. More generally, minor histocompatibility antigens (mHags) refer to immunogenic peptide which, when complexed with MHC, can generate an immune response after recognition by specific T-cells. The peptides are derived from polymorphic intracellular proteins, which are cleaved by normal pathways of antigen processing. The binding of these peptides to MHC class I or class II molecules and their expression on the cell surface can stimulate T-cell responses and thereby trigger graft rejection or graft-versus-host disease (GVHD) after hematopoietic stem cell transplantation from HLAidentical sibling donor. GVHD is a frequent complication after bone marrow transplantation (BMT), due to mismatch of minor histocompatibility antigen in HLA-matched sibling marrow transplants. HA-2 is restricted to MHC class I HLA-A\*0201. {ECO:0000269|PubMed:11544309, ECO:0000305}.

Molecular Weight: 116.4 kDa

UniProt: B0I1T2

#### **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:

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