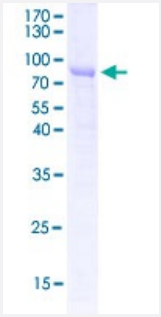
Full-Length

WAS (Human) Recombinant Protein (P01)

Catalog # H00007454-P01 Size 25 ug, 10 ug

Applications



Specification

Product Description	Human WAS full-length ORF (AAH12738.1, 1 a.a. - 502 a.a.) recombinant protein with GST tag at N-terminal.
Sequence	MSGGPMGGRPGGRGAPAVQQNIPSTLLQDHENQRLFEMLGRKCLTLATAVVQLYLALPPGAEH WTKEHCGAVCFVKDNPQKSYFIRLYGLQAGRLLWEQELYSQLVYSTPTPFFHTFAGDDCQAGLN FADEDEAQAFRALVQEKIQKRNQRQSGDRRQLPPPPTPANEERRGGLPPLPLHPGGDQGGPPV GPLSLGLATVDIQNPDITSSRYRGLPAPGPSPADKKRSGKKKISKADIGAPSGFKHVSHVGWDPQ NGFDVNNLDPDLRSLFSRAGISEAQLTDAETSKLIYDFIEDQGGLEAVRQEMRRQEPLPPPPPPS RGGNQLPRPPIVGGNKGRSGPLPPVPLGIAPPPPTPRGPPPPGRGGPPPPPPPPATGRSGPLPPP PPGAGGPPMPPPPPPPPPPPSSGNGPAPPPLPPALVPAGGLAPGGGRGALLDQIRQGIQLNKTP GAPESSALQPPPQSSEGLVGALMHVMQKRSRAIHSSDEGEDQAGDEDEDDEWDD
Theoretical MW (kDa)	81.62
Interspecies Antigen Sequence	Mouse (88); Rat (93)
Preparation Method	*in vitro* wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — WAS

Entrez GeneID	7454
GeneBank Accession#	BC012738.2
Protein Accession#	AAH12738.1
Gene Name	WAS
Gene Alias	IMD2, THC, WASP
Gene Description	Wiskott-Aldrich syndrome (eczema-thrombocytopenia)
Omim ID	300299 300392 301000 313900
Gene Ontology	Hyperlink
Gene Summary	The Wiskott-Aldrich syndrome (WAS) family of proteins share similar domain structure, and are in volved in transduction of signals from receptors on the cell surface to the actin cytoskeleton. The p resence of a number of different motifs suggests that they are regulated by a number of different s timuli, and interact with multiple proteins. Recent studies have demonstrated that these proteins, d irectly or indirectly, associate with the small GTPase, Cdc42, known to regulate formation of actin filaments, and the cytoskeletal organizing complex, Arp2/3. Wiskott-Aldrich syndrome is a rare, in herited, X-linked, recessive disease characterized by immune dysregulation and microthrombocyt openia, and is caused by mutations in the WAS gene. The WAS gene product is a cytoplasmic pr otein, expressed exclusively in hematopoietic cells, which show signalling and cytoskeletal abnor malities in WAS patients. A transcript variant arising as a result of alternative promoter usage, an d containing a different 5' UTR sequence, has been described, however, its full-length nature is no t known. [provided by RefSeq

Other Designations	OTTHUMP00000032395|Wiskott-Aldrich syndrome protein|thrombocytopenia 1 (X-linked)

Publication Reference

- Wiskott-Aldrich syndrome protein forms nuclear condensates and regulates alternative splicing.

  Baolei Yuan, Xuan Zhou, Keiichiro Suzuki, Gerardo Ramos-Mandujano, Mengge Wang, Muhammad Tehseen, Lorena V Cortés-Medina, James J Moresco, Sarah Dunn, Reyna Hernandez-Benitez, Tomoaki Hishida, Na Young Kim, Manal M Andijani, Chongwei Bi, Manching Ku, Yuta Takahashi, Jinna Xu, Jinsong Qiu, Ling Huang, Christopher Benner, Emi Aizawa, Jing Qu, Guang-Hui Liu, Zhongwei Li, Fei Yi, Yanal Ghosheh, Changwei Shao, Maxim Shokhirev, Patrizia Comoli, Francesco Frassoni, John R Yates 3rd, Xiang-Dong Fu, Conc

  Nature Communications 2022 Jun; 13(1):3646.

  Application: Microscale thermophoresis (MST), Human, Recombinant protein

Pathway

- Adherens junction
- Chemokine signaling pathway
- Fc gamma R-mediated phagocytosis
- Pathogenic Escherichia coli infection - EHEC
- Regulation of actin cytoskeleton

Disease

- Immunologic Deficiency Syndromes
- Severe Combined Immunodeficiency