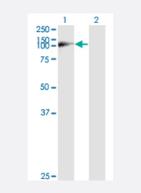
WWP1 monoclonal antibody (M01), clone 1A7

100 ug

Catalog # H00011059-M01 Size

Applications



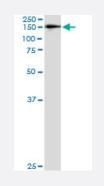
Western Blot (Transfected lysate)

Western Blot analysis of WWP1 expression in transfected 293T cell line by WWP1 monoclonal antibody (M01), clone 1A7.

Lane 1: WWP1 transfected lysate(105.2 KDa). Lane 2: Non-transfected lysate.

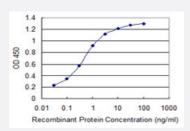
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Immunoperoxidase of monoclonal antibody to WWP1 on formalin-fixed paraffinembedded human stomach. [antibody concentration 3 ug/ml]



Immunoprecipitation

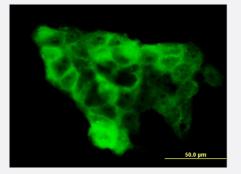
Immunoprecipitation of WWP1 transfected lysate using anti-WWP1 monoclonal antibody and Protein A Magnetic Bead, and immunoblotted with WWP1 MaxPab rabbit polyclonal antibody.



Sandwich ELISA (Recombinant protein)

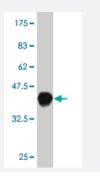
Detection limit for recombinant GST tagged WWP1 is 0.03 ng/ml as a capture antibody.





Immunofluorescence

Immunofluorescence of monoclonal antibody to WWP1 on A-431 cell. [antibody concentration 10 ug/ml]



Western Blot detection against Immunogen (37.73 KDa).

Specification	
Product Description	Mouse monoclonal antibody raised against a partial recombinant WWP1.
Immunogen	WWP1 (NP_008944, 152 a.a. ~ 260 a.a) partial recombinant protein with GST tag. MW of the GST t ag alone is 26 KDa.
Sequence	CSSSPTIEIQENGDALHENGEPSARTTARLAVEGTNGIDNHVPTSTLVQNSCCSYVVNGDNTPSS PSQVAARPKNTPAPKPLASEPADDTVNGESSSFAPTDNASVTGT
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (90); Rat (90)
lsotype	lgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.73 KDa).
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.



Applications

Western Blot (Transfected lysate)

Western Blot analysis of WWP1 expression in transfected 293T cell line by WWP1 monoclonal antibody (M01), clone 1A7.

Lane 1: WWP1 transfected lysate(105.2 KDa). Lane 2: Non-transfected lysate.

Protocol Download

Western Blot (Recombinant protein)

Protocol Download

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to WWP1 on formalin-fixed paraffin-embedded human stomach. [antibody concentration 3 ug/ml]

Protocol Download

Immunoprecipitation

Immunoprecipitation of WWP1 transfected lysate using anti-WWP1 monoclonal antibody and Protein A Magnetic Bead, and immunoblotted with WWP1 MaxPab rabbit polyclonal antibody.

Protocol Download

Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged WWP1 is 0.03 ng/ml as a capture antibody.

Protocol Download

- ELISA
- Immunofluorescence

Immunofluorescence of monoclonal antibody to WWP1 on A-431 cell. [antibody concentration 10 ug/ml]

Gene Info — WWP1	
Entrez GenelD	<u>11059</u>
GeneBank Accession#	<u>NM_007013</u>



Protein Accession#	<u>NP_008944</u>
Gene Name	WWP1
Gene Alias	AIP5, DKFZp434D2111, Tiul1, hSDRP1
Gene Description	WW domain containing E3 ubiquitin protein ligase 1
Omim ID	<u>602307</u>
Gene Ontology	Hyperlink
Gene Summary	WW domain-containing proteins are found in all eukaryotes and play an important role in the regul ation of a wide variety of cellular functions such as protein degradation, transcription, and RNA spl icing. This gene encodes a protein which contains 4 tandem WW domains and a HECT (homolog ous to the E6-associated protein carboxyl terminus) domain. The encoded protein belongs to a fa mily of NEDD4-like proteins, which are E3 ubiquitin-ligase molecules and regulate key trafficking decisions, including targeting of proteins to proteosomes or lysosomes. Alternative splicing of this gene generates at least 6 transcript variants; however, the full length nature of these transcripts ha s not been defined. [provided by RefSeq
Other Designations	Nedd-4-like ubiquitin-protein ligase TGIF-interacting ubiquitin ligase 1 atrophin-1 interacting protei n 5

Publication Reference

Inhibition of HECT E3 ligases as potential therapy for COVID-19.

Giuseppe Novelli, Jing Liu, Michela Biancolella, Tonino Alonzi, Antonio Novelli, J J Patten, Dario Cocciadiferro, Emanuele Agolini, Vito Luigi Colona, Barbara Rizzacasa, Rosalinda Giannini, Benedetta Bigio, Delia Goletti, Maria Rosaria Capobianchi, Sandro Grelli, Justin Mann, Trevor D McKee, Ke Cheng, Fatima Amanat, Florian Krammer, Andrea Guarracino, Gerardo Pepe, Carlo Tomino, Yacine Tandjaoui-Lambiotte, Yurdagul Uzunhan, Sarah Tubiana, Jade Ghosn, COVID Human Genetic Effort; French COVID Coho

Cell Death & Disease 2021 Mar; 12(4):310.

Application: IHC-P, Mouse, Mouse lung

<u>USP3 promotes breast cancer cell proliferation by deubiquitinating KLF5.</u>

Wu Y, Qin J, Li F, Yang C, Li Z, Zhou Z, Zhang H, Li Y, Wang X, Liu R, Tao Q, Chen W, Chen C.

The Journal of Biological Chemistry 2019 Nov; 294(47):17837.

Application: WB-Tr, Human, HEK 293T cells

USP9X Deubiquitylates DVL2 to Regulate WNT Pathway Specification.

Nielsen CP, Jernigan KK, Diggins NL, Webb DJ, MacGurn JA.

Cell Reports 2019 Jul; 28(4):1074.

Application: IP, WB, Human, MDA-MB-231 cells



 High expression of WWP1 predicts poor prognosis and associates with tumor progression in human colorectal cancer.

Chen JJ, Zhang W.

American Journal of Cancer Research 2018 Feb; 8(2):256.

Application: IHC, WB, Human, SW480, HCT116, SW620, HT29, LoVo, NCM460 cells

 <u>Cardiomyocyte-specific overexpression of the ubiquitin ligase Wwp1 contributes to reduction in connexin 43</u> and arrhythmogenesis.

Basheer WA, Harris BS, Mentrup HL, Abreha M, Thames EL, Lea JB, Swing DA, Copeland NG, Jenkins NA, Price RL, Matesic LE.

Journal of Molecular and Cellular Cardiology 2015 Nov; 88:1.

Application: IF, Human, Heart, Left ventricle

 <u>Functional Characterization of a WWP1/Tiul1 Tumor-derived Mutant Reveals a Paradigm of Its Constitutive</u> Activation in Human Cancer.

Courivaud T, Ferrand N, Elkhattouti A, Kumar S, Levy L, Ferrigno O, Atfi A, Prunier C.

The Journal of Biological Chemistry 2015 Aug; 290(34):21007.

Application: WB-Ce, WB-Tr, Human, HEK 293, MCF-7, HeLa cells

 <u>WWP2-WWP1 Ubiquitin Ligase Complex Coordinated by PPM1G Maintains the Balance Between Cellular</u> p73 and ΔNp73 Levels.

Chaudhary N, Maddika S.

Molecular and Cellular Biology 2014 Oct; 34(19):3754.

Application: WB-Tr, Human, HeLa cells

 Knockdown of WWP1 inhibits growth and induces apoptosis in hepatoma carcinoma cells through the activation of caspase3 and p53.

Cheng Q, Cao X, Yuan F, Li G, Tong T.

Biochemical and Biophysical Research Communications 2014 Jun; 448(3):248.

Application: WB-Ti, WB-Tr, Human, Hepatoma carcinoma, MHCC97H, SMMC7721 cells

• WWP1 delays cellular senescence by promoting p27Kip1 degradation in human diploid fibroblasts.

Cao X, Xue L, Han L, Ma L, Chen T, Tong T.

The Journal of Biological Chemistry 2011 Sep; 286(38):33447.

Application: IP, WB, Human, 2BS, HeLa, WI38 cells

• The E3 ubiquitin ligase WWP1 regulates ?GNp63-dependent transcription through Lys63 linkages.

Peschiaroli A, Scialpi F, Bernassola F, Sherbini el SE, Melino G.

Biochemical and Biophysical Research Communications 2010 Nov; 402(2):425.

Application: WB-Tr, Human, JHU-022 cells



• Endogenous spartin (SPG20) is recruited to endosomes and lipid droplets and interacts with the ubiquitin E3 ligases AIP4 and AIP5.

Edwards TL, Clowes VE, Tsang HT, Connell JW, Sanderson CM, Luzio JP, Reid E.

The Biochemical Journal 2009 Sep; 423(1):31.

Application: WB-Ce, WB-Tr, Human, HeLa cells

Pathway

- Endocytosis
- <u>Ubiquitin mediated proteolysis</u>