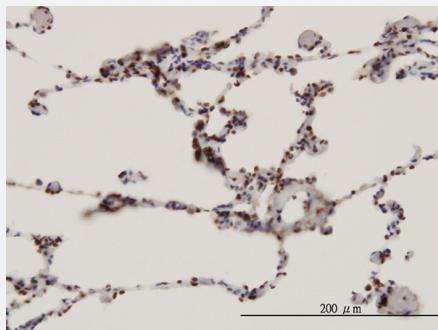


FBXW7 monoclonal antibody (M02), clone 3D1

Catalog # H00055294-M02

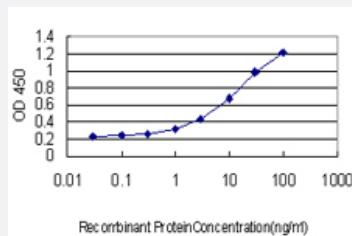
Size 100 ug

Applications



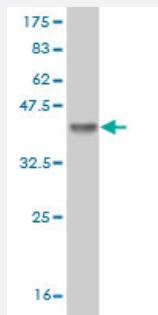
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to FBXW7 on formalin-fixed paraffin-embedded human lung. [antibody concentration 3 ug/ml]



Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged FBXW7 is approximately 0.1ng/ml as a capture antibody.



Western Blot detection against Immunogen (37.73 KDa) .

Specification

Product Description

Mouse monoclonal antibody raised against a partial recombinant FBXW7.

Immunogen	FBXW7 (NP_361014, 599 a.a. ~ 707 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	ADSTVKWDIKTGQCLQTLQGPNKHQS A VTCLQFNKNF VITSSDDGTVKLWDLKTGEFIRNLVTLE SGGSGGVVWRIRASNTKLVCAGVGSRNGTEETKLLVLDFDVDMK
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (99)
Isotype	IgG2a 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 (Recombinant protein)

[Protocol Download](#)

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

Immunoperoxidase of monoclonal antibody to FBXW7 on formalin-fixed paraffin-embedded human lung. [antibody concentration 3 ug/ml]

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged FBXW7 is approximately 0.1ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

Gene Info — FBXW7

Entrez GenelD

[55294](#)

GeneBank Accession#	NM_033632
Protein Accession#	NP_361014
Gene Name	FBXW7
Gene Alias	AGO, CDC4, DKFZp686F23254, FBW6, FBW7, FBX30, FBXO30, FBXW6, FLJ16457, SEL-10, SEL10
Gene Description	F-box and WD repeat domain containing 7
Omim ID	606278
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a member of the F-box protein family which is characterized by an approximately 40 amino acid motif, the F-box. The F-box proteins constitute one of the four subunits of ubiquitin protein ligase complex called SCFs (SKP1-cullin-F-box), which function in phosphorylation-dependent ubiquitination. The F-box proteins are divided into 3 classes: Fbws containing WD-40 domains, Fbls containing leucine-rich repeats, and Fbxs containing either different protein-protein interaction modules or no recognizable motifs. The protein encoded by this gene was previously referred to as FBX30, and belongs to the Fbws class; in addition to an F-box, this protein contains 7 tandem WD40 repeats. This protein binds directly to cyclin E and probably targets cyclin E for ubiquitin-mediated degradation. Mutations in this gene are detected in ovarian and breast cancer cell lines, implicating the gene's potential role in the pathogenesis of human cancers. Three transcript variants encoding three different isoforms have been found for this gene. [provided by RefSeq]
Other Designations	F-box and WD-40 domain protein 7 (archipelago homolog, Drosophila) F-box protein FBW7 F-box protein SEL-10 archipelago homolog archipelago, Drosophila, homolog of homolog of C elegans sel-10

Publication Reference

- [FBXW7 regulates the sensitivity of imatinib in gastrointestinal stromal tumors by targeting MCL1.](#)

Xiyu Wu, Masaaki Iwatsuki, Masakazu Takaki, Takuro Saito, Tsutomu Hayashi, Masato Kondo, Yoshiharu Sakai, Naoto Gotohda, Eiji Tanaka, Toshiro Nishida, Hideo Baba.

Gastric Cancer 2024 Mar; 27(2):235.

Application: WB, Human, GIST-T1 cells

- [Fbw7 Inhibits the Progression of Activated B-Cell Like Diffuse Large B-Cell Lymphoma by Targeting the Positive Feedback Loop of the LDHA/lactate/miR-223 Axis.](#)

Su Yao, Tairan Guo, Fen Zhang, Yu Chen, Fangping Xu, Donglan Luo, Xinlan Luo, Danyi Lin, Wenda Chen, Zhi Li, Yanhui Liu. Frontiers in Oncology 2022 Mar; 12:842356.

Application: IHC-P, Human, Human diffuse large B-cell lymphoma

- [PML Suppresses Influenza Virus Replication by Promoting FBXW7 Expression.](#)

Hai-Yan Yan, Hui-Qiang Wang, Ming Zhong, Shuo Wu, Lu Yang, Ke Li, Yu-Huan Li.
Virologica Sinica 2021 Oct; 36(5):1154.

Application: WB-Tr, Human, A-549, HEK 293T cells

- [MicroRNA-25 Exerts an Oncogenic Function by Regulating the Ubiquitin Ligase Fbxw7 in Hepatocellular Carcinoma.](#)

Hatem El-Mezayen, Kensuke Yamamura, Toshihiko Yusa, Yosuke Nakao, Norio Uemura, Fumimasa Kitamura, Rumi Itoyama, Takanobu Yamao, Takaaki Higashi, Hiromitsu Hayashi, Katsunori Imai, Akira Chikamoto, Yo-Ichi Yamashita, Hideo Baba.
Annals of Surgical Oncology 2021 Nov; 28(12):7973.

Application: IHC-P, Human, Human hepatocellular carcinoma

- [The role of FBXW7, a cell-cycle regulator, as a predictive marker of recurrence of gastrointestinal stromal tumors.](#)

Koga Y, Iwatsuki M, Yamashita K, Kiyozumi Y, Kurashige J, Masuda T, Eto K, Iwagami S, Harada K, Ishimoto T, Baba Y, Yoshida N, Miyanari N, Takamori H, Ajani JA, Baba H.

Gastric Cancer 2019 Mar; [Epub].

Application: IHC-P, Human, Human gastrointestinal stromal tumors

- [FBXW7 expression affects the response to chemoradiotherapy and overall survival among patients with oral squamous cell carcinoma: A single-center retrospective study.](#)

Arita H, Nagata M, Yoshida R, Matsuoka Y, Hirose A, Kawahara K, Sakata J, Nakashima H, Kojima T, Toya R, Murakami R, Hiraki A, Shinohara M, Nakayama H.

Tumour Biology: the Journal of the International Society for Oncodevelopmental Biology and Medicine 2017 Oct; 39(10):1010428317.

Application: IHC-P, Human, Human oral squamous cell carcinoma

- [Fbw7 regulates apoptosis in activated B-cell like diffuse large B-cell lymphoma by targeting Stat3 for ubiquitylation and degradation.](#)

Yao S, Xu F, Chen Y, Ge Y, Zhang F, Huang H, Li L, Lin D, Luo X, Xu J, Luo D, Zhu X, Liu Y.

Journal of Experimental & Clinical Cancer Research 2017 Jan; 36(1):10.

Application: IHC, IP-WB, WB-Tr, Human, Human diffuse large B-cell lymphoma, HEK 293T, OCI-LY-3, SU-DHL-2 cells

- [Dysfunction of microRNA-32 regulates ubiquitin ligase FBXW7 in multiple myeloma disease.](#)

Hua J, Ding T, Yang L.

Onco Targets Ther 2016 Oct; 9:6573.

Application: IHC-P, Human, Human multiple myeloma, healthy people

- [F-box protein FBXW7 inhibits cancer metastasis in a non-cell-autonomous manner.](#)

Yumimoto K, Akiyoshi S, Ueo H, Sagara Y, Onoyama I, Ueo H, Ohno S, Mori M, Mimori K, Nakayama KI.

The Journal of Clinical Investigation 2015 Feb; 125(2):621.

Application: IHC-P, Human, Breast cancer

- [FBxW7 as a predictor of outcomes in ovarian cancer.](#)

Dickson EL, Vogel R, Leung S, Chow C, Huntsman D, Gilks B, Subramanian S.

Journal of the American College of Surgeons 2013 Sep; 3:S72.

Application: IHC, Human, Ovarian cancer

- [Genomic and molecular characterization of esophageal squamous cell carcinoma.](#)

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Application: IHC-P, Human, Esophageal squamous cell carcinoma

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Molecular Cancer Research 2014 Jan; 12(1):32.

Application: IHC-P, WB-Tr, Human, H2009, H1975 cells, Non-small cell lung cancer

- [MYC, FBXW7 and TP53 copy number variation and expression in gastric cancer.](#)

Danielle Queiroz Calcagno, Vanessa Morais Freitas, Mariana Ferreira Leal, Carolina Rosal Teixeira de Souza, Samia Demachki, Raquel Montenegro, Paulo Pimentel Assumpção, André Salim Khayat, Marília de Arruda Cardoso Smith, Andrea Kely Campos Ribeiro dos Santos, Rommel Rodriguez Burbano.

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Application: IF, WB, Human, ACP02, ACP03

- [Structural basis for a reciprocal regulation between SCF and CSN.](#)

Enchev RI, Scott DC, da Fonseca PC, Schreiber A, Monda JK, Schulman BA, Peter M, Morris EP.

Cell Reports 2012 Sep; 2(3):616.

Pathway

- [Ubiquitin mediated proteolysis](#)

Disease

- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Disease Progression](#)
- [Genetic Predisposition to Disease](#)
- [Kidney Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Precursor T-Cell Lymphoblastic Leukemia-Lymphoma](#)
- [Pulmonary Disease](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)
- [Wilms Tumor](#)