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Mouse Monoclonal Antibody to TRIM25

Purified Mouse Monoclonal Antibody
Catalog # AO2410a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	Q14258
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	5B5B12
Isotype	Mouse IgG2b
Calculated MW	70973
Description	The protein encoded by this gene is a member of the tripartite motif (TRIM) family. The TRIM motif includes three zinc-binding domains, a RING, a B-box type 1 and a B-box type 2, and a coiled-coil region. The protein localizes to the cytoplasm. The presence of potential DNA-binding and dimerization-transactivation domains suggests that this protein may act as a transcription factor, similar to several other members of the TRIM family. Expression of the gene is upregulated in response to estrogen, and it is thought to mediate estrogen actions in breast cancer as a primary response gene.;
Immunogen	Purified recombinant fragment of human TRIM25 (AA: 211-360) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide
Application Note	ELISA: 1/10000; WB: 1/500 - 1/2000; IHC: 1/200 - 1/1000; ICC: 1/50 - 1/250; FCM: 1/200 - 1/400

Additional Information

Gene ID	7706
Other Names	EFP; Z147; RNF147; ZNF147
Dilution	WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 ICC~~N/A E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse Monoclonal Antibody to TRIM25 is for research use only and not for use in diagnostic or therapeutic procedures.

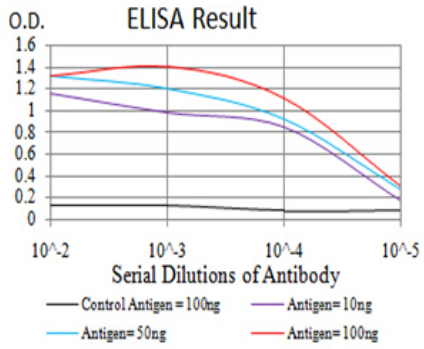
Protein Information

Name	TRIM25
Synonyms	EFP {ECO:0000303|PubMed:8248217}, RNF147
Function	Functions as a ubiquitin E3 ligase and as an ISG15 E3 ligase (PubMed:16352599). Involved in innate immune defense against viruses by mediating ubiquitination of RIGI and IFIH1 (PubMed:17392790, PubMed:29357390, PubMed:30193849, PubMed:31710640, PubMed:33849980, PubMed:36045682). Mediates 'Lys-63'-linked polyubiquitination of the RIGI N-terminal CARD-like region and may play a role in signal transduction that leads to the production of interferons in response to viral infection (PubMed:17392790, PubMed:23950712). Mediates 'Lys-63'- linked polyubiquitination of IFIH1 (PubMed:30193849). Promotes ISGylation of 14-3-3 sigma (SFN), an adapter protein implicated in the regulation of a large spectrum signaling pathway (PubMed:16352599, PubMed:17069755). Mediates estrogen action in various target organs (PubMed:22452784). Mediates the ubiquitination and subsequent proteasomal degradation of ZFHX3 (PubMed:22452784). Plays a role in promoting the restart of stalled replication forks via interaction with the KHDC3L-OOEP scaffold and subsequent ubiquitination of BLM, resulting in the recruitment and retainment of BLM at DNA replication forks (By similarity). Plays an essential role in the antiviral activity of ZAP/ZC3HAV1; an antiviral protein which inhibits the replication of certain viruses. Mechanistically, mediates 'Lys-63'- linked polyubiquitination of ZAP/ZC3HAV1 that is required for its optimal binding to target mRNA (PubMed:28060952, PubMed:28202764). Also mediates the ubiquitination of various substrates implicated in stress granule formation, nonsense-mediated mRNA decay, nucleoside synthesis and mRNA translation and stability (PubMed:36067236).
Cellular Location	Cytoplasm. Cytoplasm, Stress granule. Nucleus {ECO:0000250|UniProtKB:Q61510}
Tissue Location	Expressed in breast tumors (at protein level). Ubiquitous.

References

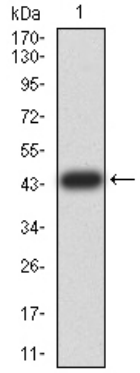
1.Science. 2015 Oct 9;350(6257):217-21. ; 2.Oncogene. 2015 Nov 12;34(46):5729-38.;

Images

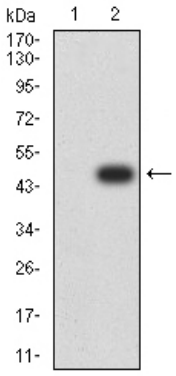


Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

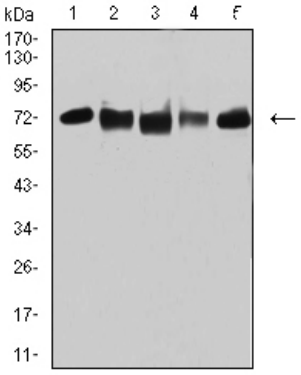
Western blot analysis using TRIM25 mAb against human TRIM25 (AA: 211-360) recombinant protein. (Expected



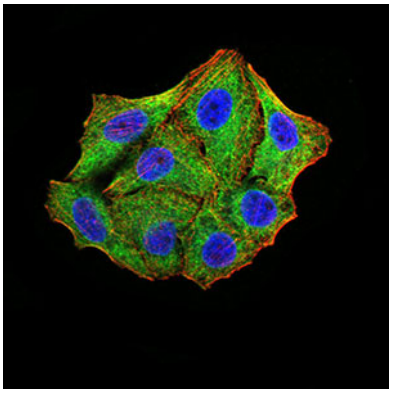
MW is 43.5 kDa)



Western blot analysis using TRIM25 mAb against HEK293 (1) and TRIM25 (AA: 211-360)-hIgGFc transfected HEK293 (2) cell lysate.

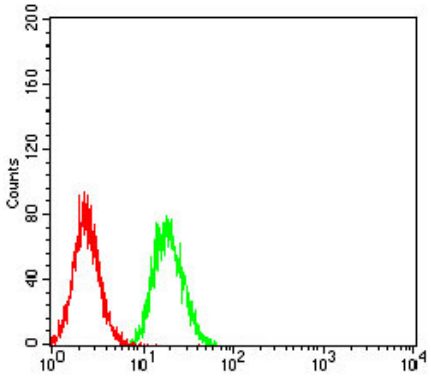


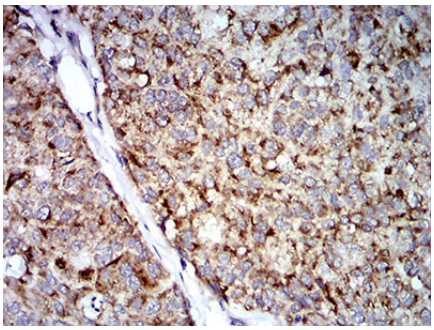
Western blot analysis using TRIM25 mouse mAb against MCF-7 (1), MCF-7 (2), K562 (3), A549 (4), and MOLT4 (5) cell lysate.



Immunofluorescence analysis of Hela cells using TRIM25 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Secondary antibody from Fisher

Flow cytometric analysis of Hela cells using TRIM25 mouse mAb (green) and negative control (red).





Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using TRIM25 mouse mAb with DAB staining.