

For Research Use Only

UFM1 Polyclonal antibody

Catalog Number: 15883-1-AP

5 Publications



Basic Information

Catalog Number: 15883-1-AP	GenBank Accession Number: BC005193	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 550 ug/ml by Nanodrop and 300 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 51569	Recommended Dilutions: WB 1:500-1:1000 IHC 1:50-1:500
Source: Rabbit	UNIPROT ID: P61960	
Isotype: IgG	Full Name: ubiquitin-fold modifier 1	
Immunogen Catalog Number: AG8667	Calculated MW: 85 aa, 9 kDa	
	Observed MW: 9-12 kDa	

Applications

Tested Applications: WB, IHC, ELISA	Positive Controls:
Cited Applications: WB, IP	WB : HT-29 cells, HEK-293 cells, HepG2 cells, mouse liver tissue, mouse lung tissue, L02 cells, U-251 cells
Species Specificity: human, mouse	IHC : human lung cancer tissue,
Cited Species: human	
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

Background Information

UFM1 (Ubiquitin-fold modifier 1) is a ubiquitin-like protein covalently conjugated with intracellular proteins through UFMylation (modification by UFM1), a process similar to ubiquitylation (PMID: 38141606). UFM1 is conjugated to its target proteins by E1-like activating enzyme UBE1DC1 and E2-like conjugating enzyme UFC1 in a manner analogous to ubiquitylation (PMID: 28234446; 33066455). At the molecular level, UFMylation is an important mediator of the protein function. Dysregulation of the UFM1 system, e.g., the knockout of UFMylation components, disturbs proteome homeostasis and triggers endoplasmic reticulum stress. Such changes are linked to developmental disorders, tumorigenesis, tissue injury, inflammation, and several hereditary neurological syndromes (PMID: 36932998). Western blot images showed that bands larger than 100kd may be proteins modified by UFM1.

Notable Publications

Author	Pubmed ID	Journal	Application
Guangxu Li	39085203	Cell Death Dis	WB
Tingxiang Yan	38903110	bioRxiv	WB
Zhifeng Wang	38762759	Autophagy	WB,IP

Storage

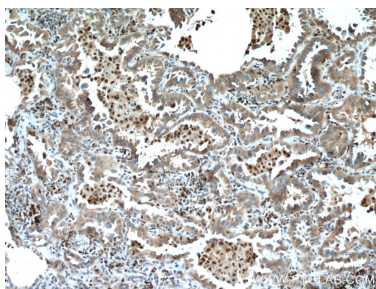
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

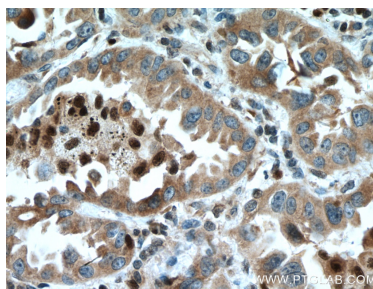
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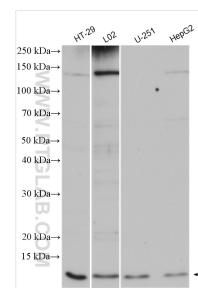
Selected Validation Data



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 15883-1-AP (UFM1 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0)).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 15883-1-AP (UFM1 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0)).



Various lysates were subjected to SDS PAGE followed by western blot with 15883-1-AP (UFM1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.