10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

AIMP2 Rabbit pAb

Catalog # AP97447

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q13155
Other Accession	Q13155
Reactivity	Rat, Human
Predicted	Pig, Mouse, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35349
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human AIMP2
Epitope Specificity	201-300/320
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 GST C-terminal domain.
SUBUNIT	Component of the aminoacyl-tRNA synthase complex which is omprised of a bifunctional glutamyl-prolyl-tRNA synthase, the onospecific isoleucyl, leucyl, glutaminyl, methionyl, lysyl, rginyl and aspartyl-tRNA synthases, and three auxiliary proteins, EF1E1/p18, AIMP2/p38 and AIMP1/p43. Binds FUBP1 (via C-terminus). nteracts in both its unphosphorylated and phosphorylated forms ith p53/TP53 (via N-terminus) in the nucleus following UV rradiation. Interacts (via N-terminus) with KARS and PARK2/parkin via first RING-type domain).
Post-translational modifications	Phosphorylated on serine residues in response to UV rradiation (By similarity). Ubiquitinated by PARK2, leading to its degradation by the roteasome. Mutant PARK2 fails to ubiquitinate AIMP2 efficiently, llowing its accumulation which may contribute to neurodegeneration ssociated with Parkinson disease.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	P38 is a probable core protein of the multisynthetase complex that serves as a template for the assembly of the supramolecular structure. Mediates ubiquitination of FUBP1 and its degradation by the proteasome. P38 is also a cofactor of multi-ARS complex and also a substrate of parkin in neuronal cell.

Additional Information

Gene ID	7965
Other Names	HLD17; JTV-1; JTV1; P38; Aimp2(p38); AIMP2_HUMAN; AIMP2; Multisynthase complex auxiliary component p38; Protein JTV-1; AIMP2_MOUSE; AIMP2_RAT; aminoacyl tRNA synthetase complex interacting multifunctional protein 2; multisynthetase complex auxiliary component p38

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	AIMP2
Synonyms	JTV1
Function	Required for assembly and stability of the aminoacyl-tRNA synthase complex (PubMed:19131329). Mediates ubiquitination and degradation of FUBP1, a transcriptional activator of MYC, leading to MYC down-regulation which is required for aveolar type II cell differentiation. Blocks MDM2-mediated ubiquitination and degradation of p53/TP53. Functions as a proapoptotic factor.
Cellular Location	Cytoplasm, cytosol. Nucleus {ECO:0000250|UniProtKB:Q8R010}. Note=Following DNA damage, dissociates from the aminoacyl-tRNA synthase complex and translocates from the cytoplasm to the nucleus. {ECO:0000250|UniProtKB:Q8R010}

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