

Pellino 1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP54902

Product Information

Application	IHC-P, IHC-F, IF, ICC
Primary Accession	Q96FA3
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46286
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Pellino 1
Epitope Specificity	261-360/418
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the pellino family.
Post-translational modifications	Phosphorylation by IRAK1 and IRAK4 enhances its E3 ligase activity.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Additional Information

Gene ID	57162
Other Names	E3 ubiquitin-protein ligase pellino homolog 1, Pellino-1, 2.3.2.27, Pellino-related intracellular-signaling molecule, RING-type E3 ubiquitin transferase pellino homolog 1, PELI1, PRISM
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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	PELI1 {ECO:0000303 PubMed:30952868}
Synonyms	PRISM

Function	<p>E3 ubiquitin ligase catalyzing the covalent attachment of ubiquitin moieties onto substrate proteins (PubMed:12496252, PubMed:17675297, PubMed:29883609, PubMed:30952868). Involved in the TLR and IL-1 signaling pathways via interaction with the complex containing IRAK kinases and TRAF6 (PubMed:12496252, PubMed:17675297). Acts as a positive regulator of inflammatory response in microglia through activation of NF-kappa-B and MAP kinase (By similarity). Mediates 'Lys- 63'-linked polyubiquitination of IRAK1 allowing subsequent NF-kappa-B activation (PubMed:12496252, PubMed:17675297). Conjugates 'Lys-63'- linked ubiquitin chains to the adapter protein ASC/PYCARD, which in turn is crucial for NLRP3 inflammasome activation (PubMed:34706239). Mediates 'Lys-48'-linked polyubiquitination of RIPK3 leading to its subsequent proteasome-dependent degradation; preferentially recognizes and mediates the degradation of the 'Thr-182' phosphorylated form of RIPK3 (PubMed:29883609). Negatively regulates necroptosis by reducing RIPK3 expression (PubMed:29883609). Mediates 'Lys-63'-linked ubiquitination of RIPK1 (PubMed:29883609). Following phosphorylation by ATM, catalyzes 'Lys-63'-linked ubiquitination of NBN, promoting DNA repair via homologous recombination (PubMed:30952868). Negatively regulates activation of the metabolic mTORC1 signaling pathway by mediating 'Lys-63'-linked ubiquitination of mTORC1-inhibitory protein TSC1 and thereby promoting TSC1/TSC2 complex stability (PubMed:33215753).</p>
Cellular Location	Chromosome. Note=Localizes to DNA double-strand breaks (DSBs) in response to DNA damage.
Tissue Location	Expressed at high levels in normal skin but decreased in keratinocytes from toxic epidermal necrolysis (TEN) patients (at protein level).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.