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ANGEL2 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2749c

Product Information

Application	WB, IHC-P, E
Primary Accession	Q5VTE6
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15012
Calculated MW	62339
Antigen Region	108-138

Additional Information

Gene ID	90806
Other Names	Protein angel homolog 2, ANGEL2, KIAA0759L
Target/Specificity	This ANGEL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 108-138 amino acids from the Central region of human ANGEL2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ANGEL2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ANGEL2
Synonyms	KIAA0759L
Function	RNA 2',3'-cyclic phosphatase that catalyzes the hydrolysis of RNA molecules with a 2',3'-cyclic phosphate at the 3' end to produce RNA with a linear

3'-phosphate group (PubMed:32732418, PubMed:36180430). Essential for the maturation and processing of mitochondrial RNAs, particularly those generated via non-canonical pathways (By similarity). Antagonizes pre-tRNA processing and XBP1 mRNA splicing during the unfolded protein response by limiting the availability of 2',3'-cyclic phosphate substrates for the tRNA ligase complex (PubMed:32732418). Promotes tRNA recycling by eliminating 2',3'-cyclic phosphate groups from cleaved tRNAs, thereby enabling the tRNA nucleotidyltransferase TRNT1 to reattach the CCA tail essential for aminoacylation and subsequent translation (PubMed:32732418).

Cellular Location Mitochondrion matrix

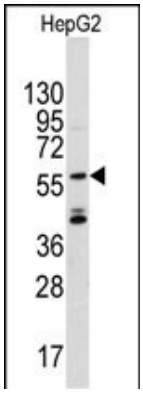
Background

ANGEL 2 is a member of the CCR4/nocturin family.

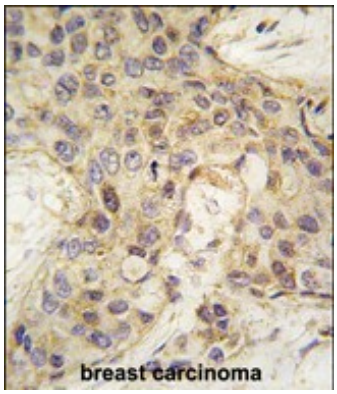
References

Lipovich,L.,Gene 286 (2), 203-213 (2002)
Gregory S.G.,Nature 441:315-321(2006).

Images



Western blot analysis of anti-ANGEL2 Pab (Cat.#AP2749c) in CEM cell line lysates (35ug/lane). ANGEL2 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with ANGEL2 antibody (Center) (Cat.#AP2749c), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

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