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RECK Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9259c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	O95980
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22330
Calculated MW	106457
Antigen Region	430-456

Additional Information

Gene ID	8434
Other Names	Reversion-inducing cysteine-rich protein with Kazal motifs, hRECK, Suppressor of tumorigenicity 15 protein, RECK, ST15
Target/Specificity	This RECK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 430-456 amino acids from the Central region of human RECK.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	RECK Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RECK {ECO:0000303|PubMed:9789069, ECO:0000312|HGNC:HGNC:11345}
Function	Functions together with ADGRA2 to enable brain endothelial cells to selectively respond to Wnt7 signals (WNT7A or WNT7B) (PubMed:28289266,

PubMed:30026314). Plays a key role in Wnt7-specific responses: required for central nervous system (CNS) angiogenesis and blood-brain barrier regulation (By similarity). Acts as a Wnt7-specific coactivator of canonical Wnt signaling by decoding Wnt ligands: acts by interacting specifically with the disordered linker region of Wnt7, thereby conferring ligand selectivity for Wnt7 (PubMed:30026314). ADGRA2 is then required to deliver RECK-bound Wnt7 to frizzled by assembling a higher-order RECK-ADGRA2-Fzd-LRP5-LRP6 complex (PubMed:30026314). Also acts as a serine protease inhibitor: negatively regulates matrix metalloproteinase-9 (MMP9) by suppressing MMP9 secretion and by direct inhibition of its enzymatic activity (PubMed:18194466, PubMed:9789069). Also inhibits metalloproteinase activity of MMP2, MMP14 (MT1-MMP) and ADAM10 (PubMed:9789069, PubMed:33731436).

Cellular Location Cell membrane; Lipid-anchor, GPI-anchor

Tissue Location Expressed in various tissues and untransformed cells (PubMed:9789069). It is undetectable in tumor-derived cell lines and oncogenically transformed cells (PubMed:9789069)

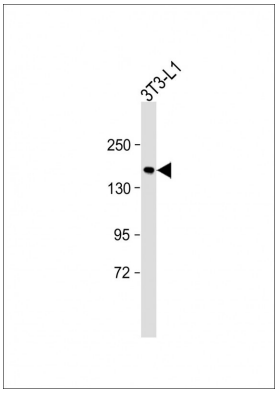
Background

RECK is a cysteine-rich, extracellular protein with protease inhibitor-like domains whose expression is suppressed strongly in many tumors and cells transformed by various kinds of oncogenes. In normal cells, this membrane-anchored glycoprotein may serve as a negative regulator for matrix metalloproteinase-9, a key enzyme involved in tumor invasion and metastasis.

References

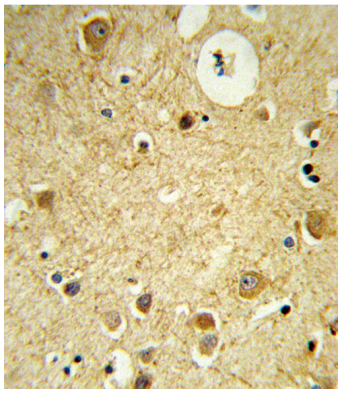
Du,Y.Y., et.al., World J. Gastroenterol. 16 (7), 904-908 (2010)
Pesta,M., et.al., Anticancer Res. 29 (11), 4535-4539 (2009)
Takahashi,C., et.al., Tanpakushitsu Kakusan Koso 54 (13), 1742-1746 (2009)

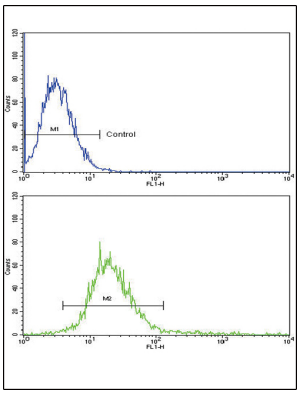
Images



All lanes : Anti-RECK Antibody (Center) at 1:2000 dilution+ 3T3-L1 cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 150kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Formalin-fixed and paraffin-embedded human brain tissue reacted with RECK Antibody (Center), 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.





RECK Antibody (Center) (Cat. #AP9259c) flow cytometric analysis of k562 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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