

#### **RECK Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9259c

#### Specification

## **RECK Antibody (Center) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<u>095980</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	106457
Antigen Region	430-456

### **RECK Antibody (Center) - 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~~1:10~50 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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.

### **RECK Antibody (Center) - 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:<u>28289266</u>, PubMed:<u>30026314</u>). 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:<u>30026314</u>). ADGRA2 is then required to deliver RECK-bound Wnt7 to frizzled by assembling a higher-order RECK-ADGRA2-Fzd-LRP5-LRP6 complex (PubMed:<u>30026314</u>). 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:<u>18194466</u>, PubMed:<u>9789069</u>). Also inhibits metalloproteinase activity of MMP2 and MMP14 (MT1-MMP) (PubMed:<u>9789069</u>).

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)

# **RECK Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### **RECK Antibody (Center) - Images**



Western blot analysis of RECK Antibody (Center) (Cat. #AP9259c) in HepG2 cell line lysates (35ug/lane). RECK (arrow) was detected using the purified Pab.





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.

### **RECK Antibody (Center) - 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.

# **RECK Antibody (Center) - 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)