Datasheet for ABIN7042971

anti-ADGRB1 antibody (Extracellular)

4 Images

Go to Product page

Overview

Quantity:	50 µL
Target:	ADGRB1
Binding Specificity:	AA 97-112, Extracellular
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ADGRB1 antibody is un-conjugated
Application:	Immunohistochemistry (IHC), Western Blotting (WB), Immunofluorescence (IF), Immunofluorescence (Cultured Cells) (IF (cc)), Live Cell Imaging (LCI)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to BAI1
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)GRVRTYQFDSFLESTR, corresponding to amino acid residues 97-112 of mouse BAI1
Isotype:	IgG
Specificity:	Extracellular, N-terminus
Cross-Reactivity:	Human, Mouse, Rat
Cross-Reactivity (Details):	The antibody will recognize the intact BAI1 receptor as well as the proteolytically processed N-terminal fragment. This fragment is also known as Vasculostatin (Vstat120).

Product Details

Predicted Reactivity:	Rat,human - identical
Characteristics:	Anti-BAI1 (extracellular) Antibody (ABIN7042971 and ABIN7043944)) is a highly specific antibody directed against an epitope of the mouse protein. The antibody can be used in western blot, immunohistochemistry, and indirect live cell flow cytometry applications. It has been designed to recognize BAI1 from rat, mouse, and human samples.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	ADGRB1
Alternative Name:	ADGRB1 (ADGRB1 Products)
Background:	Brain-specific angiogenesis inhibitor 1, Adhesion G protein-coupled receptor B1, ADGRB1, GDAIF,The three members of the brain angiogenesis inhibitor (Bai1-3) are receptors belonging to the adhesion subfamily of G-protein coupled receptor superfamily. Like all members of GPCRs, all three Bais have seven transmembrane domains, an intracellular C-terminal tail and extracellular N-terminus. Like other adhesion members, the N-terminus is quite large1,2. Many domains are localized to the N-terminus, various glycosylations sites are present, there is a GPCR proteolysis site, a putative hormone binding domain and thrombospondin type 1 repeats which regulate the anti-angiogenic activity of thrombospondin-12,3. The C-terminal tail interacts with PDZ-domain proteins. Unique to Bai1 is a proline-rich domain required for interacting with Src homology domains and WW domain proteins2,4.Like most adhesion GPCRs, Bai also undergo proteolysis at the N-terminus at a highly rich cystein domain2. Following autocleavage, the N-terminal fragment remains associated to the receptor. In Bai1, proteolysis yields a partly secreted 120 kDa. fragment (vasculostatin-120) or a 40 kDa. fragment both having antiangiogenic effects2,5. At the mRNA level, all Bais are expressed in fetal and adult human brain2,6. Bai2 is detected in the human heart and skeletal muscle. Bai3 is expressed in the human heart, testis and small intestine. In mouse, both Bai2 and Bai3 are restricted to the brain2.These receptors are implicated in various diseases and disorders such as primary glioma, pulmonary adenocarcinomas, gastric and colorectal cancers2,6,7. Alternative names: BAI1, Brain-specific angiogenesis inhibitor 1, Adhesion G protein-coupled receptor B1, ADGRB1, GDAIF
Gene ID:	107831
NCBI Accession:	NM_001702

Target Details

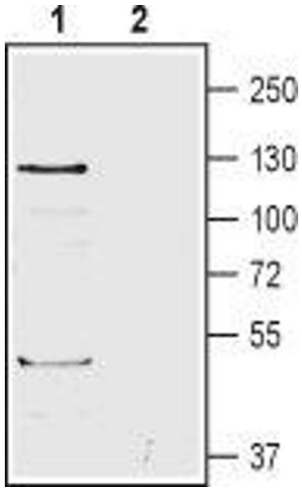
UniProt:	Q3UHD1

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:200 Application Dilutions Western blot wb: 1:200
Comment:	Cited Application: LCI Negative Control: BLP-BR021 Blocking Peptide: BLP-BR021
Restrictions:	For Research Use only

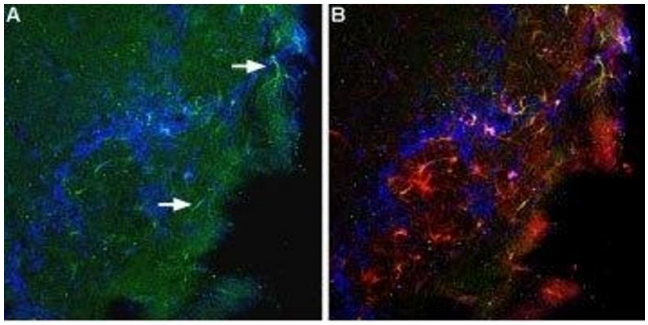
Handling

Format:	Lyophilized
Reconstitution:	Recosntitute with double distilled water (DDW) to a concentration of 1.0 mg/mL.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).



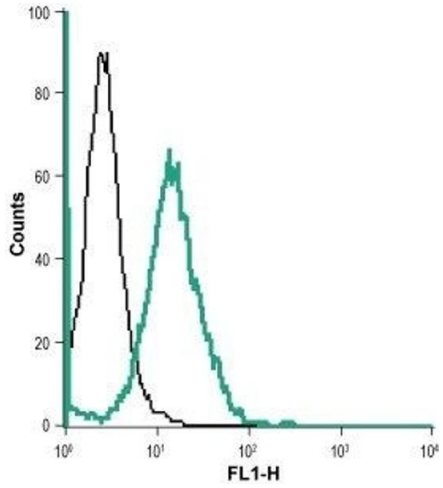
Western Blotting

Image 1. Western blot analysis of human HL-60 promyelocytic leukemia cell lysates: - 1. Anti-BAI1 (extracellular) Antibody (ABIN7042971 and ABIN7043944), (1:200).2. Anti-BAI1 (extracellular) Antibody, preincubated with BAI1 (extracellular) Blocking Peptide (#BLP-BR021).



Immunohistochemistry

Image 2. Expression of BAI1 in mouse olfactory bulb - Immunohistochemical staining of mouse perfusion-fixed olfactory bulb frozen sections using Anti-BAI1 (extracellular) Antibody (ABIN7042971 and ABIN7043944), (1:200). A. BAI1 (green) is expressed in astrocyte-like cells (arrows). B. Double-staining of BAI1 (green) and glial fibrillary acidic protein (red) reveals expression of BAI1 in a subset of astrocytes. Nuclear staining of cells using the DNA dye DAPI (blue).



Flow Cytometry

Image 3. Cell surface detection of BAI1 in live intact human HL-60 promyelocytic leukemia cell line: (black line) Unstained cells + goat-anti-rabbit-AlexaFluor-488 secondary antibody. (green line) Cells + Anti-BAI1 (extracellular) Antibody (ABIN7042971 and ABIN7043944), (1:20) + goat-anti-rabbit-AlexaFluor-488 secondary antibody.

Please check the product details page for more images. Overall 4 images are available for ABIN7042971.