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BAI1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8170a

Specification

BAI1 Antibody (C-term) - Product Information

Application	**WB, FC, IHC-P,E**
Primary Accession	O14514
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**173501**
Antigen Region	**1537-1567**

BAI1 Antibody (C-term) - Additional Information

Gene ID 575

Other Names
Brain-specific angiogenesis inhibitor 1, BAI1

Target/Specificity
This BAI1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1537-1567 amino acids from the C-terminal region of human BAI1.

Dilution
WB~~1:1000
FC~~1:10~50
IHC-P~~1:10~50
E~~Use at an assay dependent concentration.

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
BAI1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

BAI1 Antibody (C-term) - Protein Information

Name ADGRB1 (HGNC:943)

Function Phosphatidylserine receptor which enhances the engulfment of apoptotic cells (PubMed:24509909). Also mediates the binding and engulfment of Gram-negative bacteria (PubMed:26838550). Stimulates production of reactive oxygen species by macrophages in response to Gram-negative bacteria, resulting in enhanced microbicidal macrophage activity (PubMed:26838550). In the gastric mucosa, required for recognition and engulfment of apoptotic gastric epithelial cells (PubMed:24509909). Promotes myoblast fusion (By similarity). Activates the Rho pathway in a G-protein-dependent manner (PubMed:23782696). Inhibits MDM2-mediated ubiquitination and degradation of DLG4/PSD95, promoting DLG4 stability and regulating synaptic plasticity (By similarity). Required for the formation of dendritic spines by ensuring the correct localization of PARD3 and TIAM1 (By similarity). Potent inhibitor of angiogenesis in brain and may play a significant role as a mediator of the p53/TP53 signal in suppression of glioblastoma (PubMed:11875720).

Cellular Location
Cell membrane; Multi-pass membrane protein. Cell projection, phagocytic cup {ECO:0000250|UniProtKB:Q3UHD1}. Cell junction, focal adhesion {ECO:0000250|UniProtKB:Q3UHD1}. Cell projection, dendritic spine {ECO:0000250|UniProtKB:C0HL12}. Postsynaptic density {ECO:0000250|UniProtKB:Q3UHD1} [Vasculostatin-40]: Secreted

Tissue Location
Expressed in brain (at protein level) (PubMed:12074842, PubMed:12507886). Expressed on mononuclear phagocytes and monocyte-derived macrophages in the gastric mucosa (at protein level) (PubMed:24509909). Expressed in normal pancreatic tissue but not in pancreatic tumor tissue (PubMed:11875720). Reduced or no expression is observed in some glioblastomas (PubMed:12507886)

BAI1 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

BAI1 Antibody (C-term) - Images

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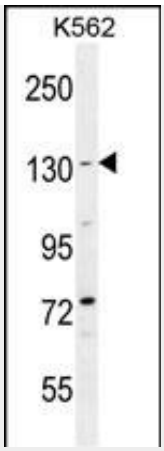
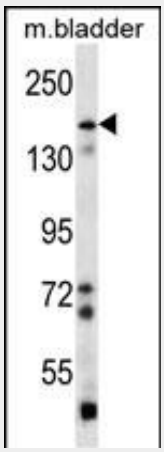
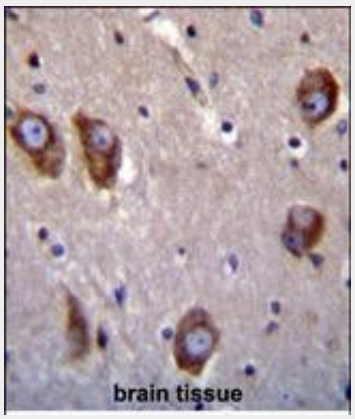


BAI1 Antibody (Q1552) (Cat. #AP8170a) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the BAI1 antibody detected the BAI1 protein (arrow).



BAI1 Antibody (Q1552) (Cat. #AP8170a) western blot analysis in mouse bladder tissue lysates (35ug/lane).This demonstrates the BAI1 antibody detected the BAI1 protein (arrow).



BAI1 antibody (C-term) (Cat. #AP8170a)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of BAI1 antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

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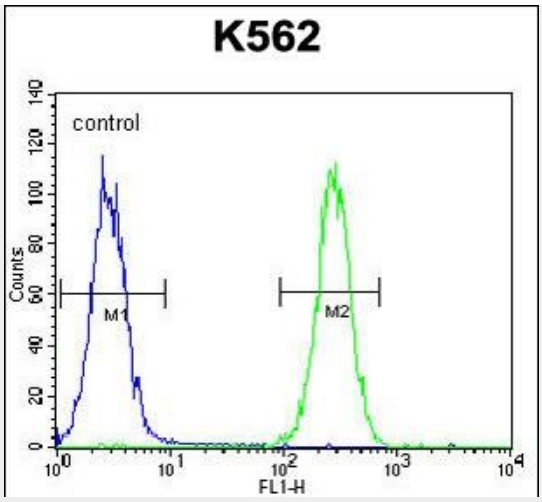

BAI1 Antibody (C-term) (Cat. #AP8170a) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

BAI1 Antibody (C-term) - Background

Angiogenesis is controlled by a local balance between stimulators and inhibitors of new vessel growth and is suppressed under normal physiologic conditions. Angiogenesis has been shown to be essential for growth and metastasis of solid tumors. In order to obtain blood supply for their growth, tumor cells are potently angiogenic and attract new vessels as results of increased secretion of inducers and decreased production of endogenous negative regulators. BAI1 contains at least one 'functional' p53-binding site within an intron, and its expression has been shown to be induced by wildtype p53. There are two other brain-specific angiogenesis inhibitor genes, designated BAI2 and BAI3 which along with BAI1 have similar tissue specificities and structures, however only BAI1 is transcriptionally regulated by p53. BAI1 is postulated to be a member of the secretin receptor family, an inhibitor of angiogenesis and a growth suppressor of glioblastomas.

BAI1 Antibody (C-term) - References

Kaur, B., et al., Am. J. Pathol. 162(1):19-27 (2003). Mori, K., et al., Neurosci. Res. 43(1):69-74 (2002). Duda, D.G., et al., Br. J. Cancer 86(3):490-496 (2002). Shiratsuchi, T., et al., Biochem. Biophys. Res. Commun. 247(3):597-604 (1998). Fukushima, Y., et al., Int. J. Oncol. 13(5):967-970 (1998).

BAI1 Antibody (C-term) - Citations

- Novel Isoforms of Adhesion G Protein-Coupled Receptor B1 (ADGRB1/BAI1) Generated from an Alternative Promoter in Intron 17
- BAI1 localizes AMPA receptors at the cochlear afferent post-synaptic density and is essential for hearing
- Mice lacking full length Adgrb1 (Bai1) exhibit social deficits, increased seizure susceptibility, and altered brain development