CPTC-BAI1-1 (CAB080090)

Uniprot ID: O14514
Protein name: AGRB1_HUMAN
Full name: Adhesion G protein-coupled receptor B1
Tissue specificity: 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).
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). [Vasculostatin-120]: Inhibits angiogenesis in a CD36-dependent manner. [Vasculostatin-40]: Inhibits angiogenesis.
Subcellular location:
Unnamed:
Cell membrane (*experimental evidence*) (Topo: Multi-pass membrane protein (*match to sequence model*))
Cell projection > Phagocytic cup (*by similarity*)
Cell junction > Focal adhesion (*by similarity*)
Cell projection > Dendritic spine (*by similarity*)
Cell junction > Synapse > Postsynaptic density (*by similarity*)
Vasculostatin-120:
Secreted (*experimental evidence*)
Vasculostatin-40:
Secreted (*experimental evidence*)
Protein existence: Experimental evidence at protein level

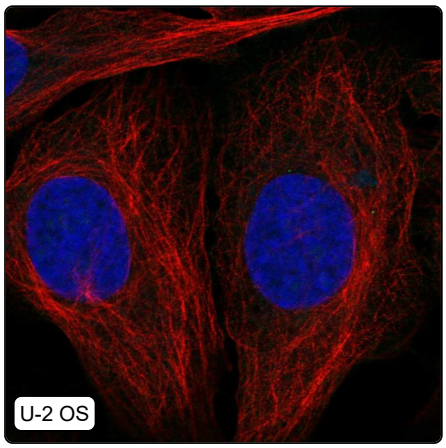
Comment:

Immunohistochemistry

no image selected

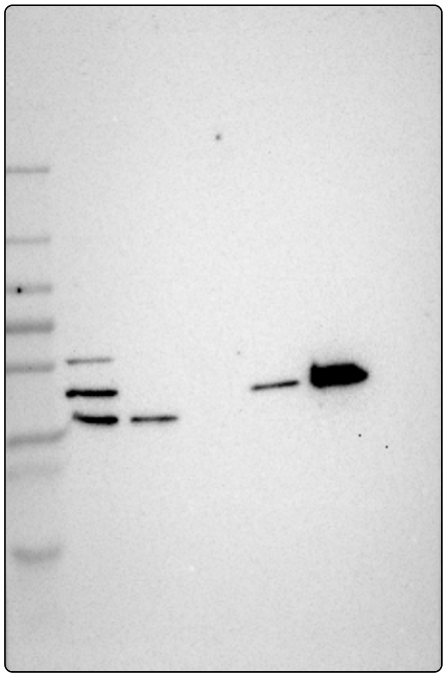
IHC protocol:	HIER pH6, Dilution 1:750
IHC test staining:	Positivity in apical membrane and cytoplasm.
Literature conformance:	Not consistent with gene/protein characterization data
Literature significance:	
RNA similarity:	Very low consistency between antibody staining and RNA expression data
RNA tissue specificity:	Tissue enriched (brain)
RNA tissue distribution:	Detected in many
IHC Sibling similarity:	

Immunofluorescence



IF Overlay:	antibody (green), anti-tubulin (red) and DAPI (blue)
IF main location:	
IF additional location:	
IF approved for publication on HPA:	No
IF in SiHa:	Negative
IF in SK-MEL-30:	Negative
IF in U-2 OS:	Negative

Western blot



WB Size markers (kDa):	250, 130, 100, 70, 55, 35, 25, 15, 10
WB Lanes:	Marker (1), RT4 (2), U-251 MG (3), Plasma (4), Liver (5), Tonsil (6)
WB Target weight (kDa):	173, 173, 173
WB Validation:	Uncertain (Only bands not corresponding to the predicted size.)