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Anti-GPR124 Antibody

Catalog # AP61047

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q96PE1
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	142647

Additional Information

Gene ID	25960
Other Names	KIAA1531; TEM5; G-protein coupled receptor 124; Tumor endothelial marker 5
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human GPR124. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IF/IC (1/100 - 1/500) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

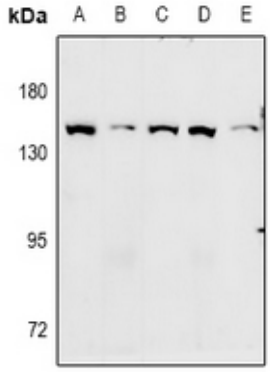
Name	ADGRA2 (HGNC:17849)
Function	Endothelial receptor which functions together with RECK to enable brain endothelial cells to selectively respond to Wnt7 signals (WNT7A or WNT7B) (PubMed:28289266, PubMed:30026314). Plays a key role in Wnt7-specific responses, such as endothelial cell sprouting and migration in the forebrain and neural tube, and establishment of the blood-brain barrier (By similarity). Acts as a Wnt7-specific coactivator of canonical Wnt signaling: required to deliver RECK-bound Wnt7 to frizzled by assembling a higher-order RECK-ADGRA2-Fzd-LRP5-LRP6 complex (PubMed:30026314). ADGRA2-tethering function does not rely on its G protein-coupled receptor (GPCR) structure but instead on its combined capacity to interact with RECK extracellularly and recruit the Dishevelled scaffolding protein intracellularly (PubMed:30026314). Binds to the glycosaminoglycans heparin, heparin sulfate, chondroitin sulfate and dermatan sulfate (PubMed:16982628).
Cellular Location	Cell membrane; Multi-pass membrane protein. Cell projection, filopodium.

Note=Enriched at lateral cell borders and also at sites of cell-ECM (extracellular matrix) contact

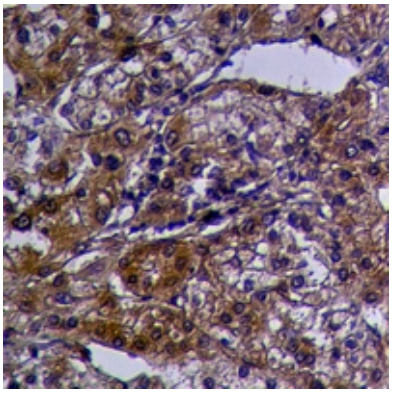
Tissue Location

Expressed in endothelial cells (at protein level) (PubMed:15021905, PubMed:16982628). Abundantly expressed in heart, placenta, ovary, small intestine, and colon (PubMed:15021905)

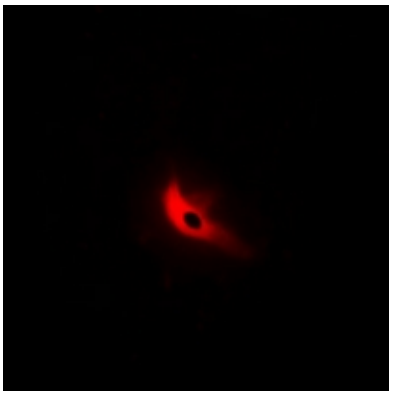
Images



Western blot analysis of GPR124 expression in CT26 (A), PMVEC (B), MEF (C), A549 (D), LOVO (E) whole cell lysates. (Predicted band size: 142 kD; Observed band size: 142 kD)



Immunohistochemical analysis of GPR124 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of GPR124 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with Alexa Fluor 647-conjugated secondary antibody (red) in PBS at room temperature in the dark.

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