

ARG45514 anti-GPR56 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes GPR56
Tested Reactivity	Ms, Rat
Tested Application	FACS, IHC-P, WB
Specificity	GPR56
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	GPR56
Species	Mouse
Immunogen	Recombinant protein containing to mouse GPR56.
Conjugation	Un-conjugated
Alternate Names	ADGRG1; adhesion G protein-coupled receptor G1; BPPR; G-protein coupled receptor 56; C; GPR56 subunit alpha; BFPP; GPR56 NT; Protein TM7XN1; TM7XN1; GPR56 seven-transmembrane subunit; GPR56 extracellular subunit; N; GPR56 subunit beta; GPR56 7TM; GPR56; TM7LN4; GPR56 CT

Application Instructions

Application table	Application	Dilution
	FACS	1 - 3 µg/10 ⁶ cells
	IHC-P	2-5 µg/ml
	WB	0.25-0.5 µg/ml
	Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

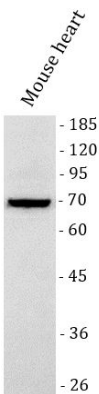
Properties

Form	Powder
Purification	Affinity purified
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl and 4% Trehalose.
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

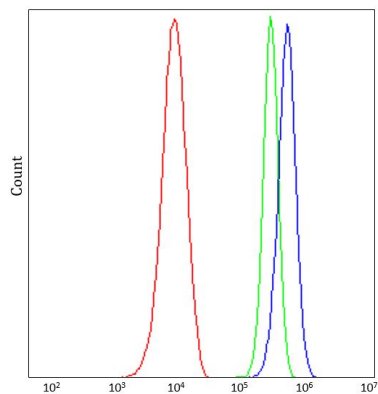
Gene Symbol	ADGRG1
Gene Full Name	adhesion G protein-coupled receptor G1
Background	This gene encodes a member of the G protein-coupled receptor family and regulates brain cortical patterning. The encoded protein binds specifically to transglutaminase 2, a component of tissue and tumor stroma implicated as an inhibitor of tumor progression. Mutations in this gene are associated with a brain malformation known as bilateral frontoparietal polymicrogyria. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014]
Function	<p>Receptor involved in cell adhesion and probably in cell-cell interactions. Mediates cell matrix adhesion in developing neurons and hematopoietic stem cells. Receptor for collagen III/COL3A1 in the developing brain and involved in regulation of cortical development, specifically in maintenance of the pial basement membrane integrity and in cortical lamination (By similarity). Binding to the COL3A1 ligand inhibits neuronal migration and activates the RhoA pathway by coupling to GNA13 and possibly GNA12 (PubMed:22238662). Plays a role in the maintenance of hematopoietic stem cells and/or leukemia stem cells in bone marrow niche (By similarity). Plays a critical role in cancer progression by inhibiting VEGFA production threereby inhibiting angiogenesis through a signaling pathway mediated by PRKCA (PubMed:16757564, PubMed:21724588). Plays an essential role in testis development (By similarity).</p> <p>[ADGRG1 N-terminal fragment]: Plays a critical role in cancer progression by activating VEGFA production and angiogenesis through a signaling pathway mediated by PRKCA (PubMed:21724588). [UniProt]</p>
Calculated Mw	78 kDa
PTM	<p>Autoproteolytically cleaved into 2 fragments; the large extracellular N-terminal fragment (ADGRG1 NT) and the membrane-bound C-terminal fragment (ADGRG1 CT) predominantly remain associated and non-covalently linked. Shedding to yield the secreted ADGRG1 N-terminal fragment seems to involve metalloprotease(s) (PubMed:22333914).</p> <p>N-glycosylated. Contains sialic acid residues.</p> <p>Ubiquitinated. Undergoes polyubiquitination upon activation. [UniProt]</p>
Cellular Localization	Cell membrane; Multi-pass membrane protein. ADGRG1 N-terminal fragment: Secreted. ADGRG1 C-terminal fragment: Membrane raft. Note=Interaction with its ligand COL3A1 leads to the release of ADGRG1 NT from the membrane and triggers the association of ADGRG1 CT with lipid rafts. [UniProt]

Images



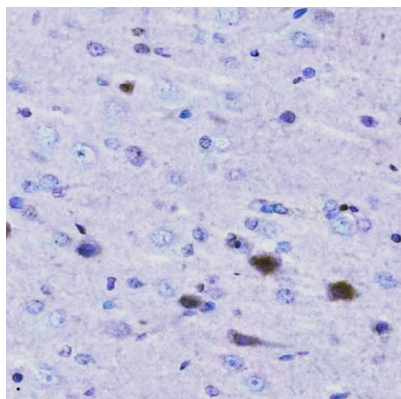
ARG45514 anti-GPR56 antibody WB image

Western blot: Mouse heart stained with ARG45514 anti-GPR56 antibody at 0.5 µg/ml dilution.



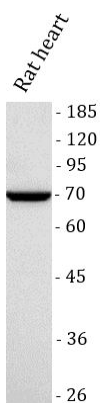
ARG45514 anti-GPR56 antibody FACS image

Flow Cytometry: RAW264.7 stained with ARG45514 anti-GPR56 antibody at $1\text{ }\mu\text{g}/10^6$ cells dilution.



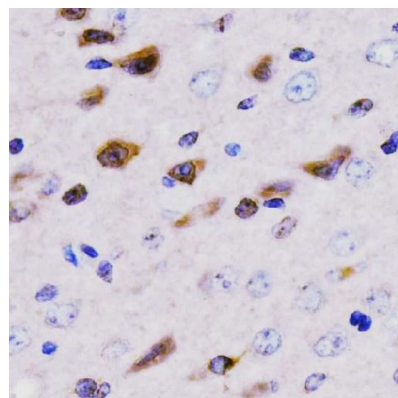
ARG45514 anti-GPR56 antibody IHC-P image

Immunohistochemistry: Rat brain stained with ARG45514 anti-GPR56 antibody at $2\text{ }\mu\text{g}/\text{ml}$ dilution.



ARG45514 anti-GPR56 antibody WB image

Western blot: Rat heart stained with ARG45514 anti-GPR56 antibody at $0.5\text{ }\mu\text{g}/\text{ml}$ dilution.



ARG45514 anti-GPR56 antibody IHC-P image

Immunohistochemistry: Mouse brain stained with ARG45514 anti-GPR56 antibody at $2\text{ }\mu\text{g}/\text{ml}$ dilution.