

Anti-GPR68 / OGR1 Antibody (Extracellular Domain)
Rabbit Anti Human Polyclonal Antibody
Catalog # ALS17540**Specification****Anti-GPR68 / OGR1 Antibody (Extracellular Domain) - Product Information**

Application	IHC-P
Primary Accession	Q15743
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41077
Dilution	IHC-P~~N/A

Anti-GPR68 / OGR1 Antibody (Extracellular Domain) - Additional Information**Gene ID** 8111**Alias Symbol** **GPR68****Other Names**

GPR68, Brgrb, G protein-coupled receptor 68, G-protein coupled receptor 68, OGR1, Brgr1, GPR12A, OGR-1

Target/Specificity

Human GPR68. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage

Immunoaffinity purified

Precautions

Anti-GPR68 / OGR1 Antibody (Extracellular Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-GPR68 / OGR1 Antibody (Extracellular Domain) - Protein Information**Name** GPR68 {ECO:0000303|PubMed:27693231, ECO:0000312|HGNC:HGNC:4519}**Function**

Proton-sensing G-protein coupled receptor activated by extracellular pH, which is required to monitor pH changes and generate adaptive reactions (PubMed:12955148, PubMed:29677517, PubMed:32865988, PubMed:33478938, PubMed:39753132, PubMed:40215959, PubMed:40215960). The receptor

is almost silent at pH 7.8 but fully activated at pH 6.8 (PubMed:12955148, PubMed:39753132). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide- binding proteins (G proteins) and modulates the activity of downstream effectors, such as phospholipase C (PubMed:29677517, PubMed:39753132). GPR68 is mainly coupled to G(q) G proteins and mediates production of diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) (PubMed:29677517, PubMed:39753132). Acts as a key mechanosensor of fluid shear stress and membrane stretch (PubMed:29677517, PubMed:30471999). Expressed in endothelial cells of small-diameter resistance arteries, where it mediates flow-induced dilation in response to shear stress (PubMed:29677517). May represent an osteoblastic pH sensor regulating cell-mediated responses to acidosis in bone (By similarity). Acts as a regulator of calcium-sensing receptor CASR in a seesaw manner: GPR68-mediated signaling inhibits CASR signaling in response to protons, while CASR inhibits GPR68 in presence of extracellular calcium (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Found at low level in a wide range of tissues, but significantly expressed in lung, kidney, bone and nervous system

Anti-GPR68 / OGR1 Antibody (Extracellular Domain) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-GPR68 / OGR1 Antibody (Extracellular Domain) - Images