

GPR68 / OGR1 Antibody (C-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS10291**Specification**

GPR68 / OGR1 Antibody (C-Terminus) - Product Information

Application	IHC-P
Primary Accession	Q15743
Reactivity	Human, Mouse, Rabbit, Hamster, Monkey, Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41kDa KDa
Dilution	IHC-P ~ N/A

GPR68 / OGR1 Antibody (C-Terminus) - Additional Information**Gene ID** 8111**Other Names**

Ovarian cancer G-protein coupled receptor 1, OGR-1, G-protein coupled receptor 68, GPR12A, Sphingosylphosphorylcholine receptor, GPR68, OGR1

Target/Specificity

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

Reconstitution & Storage

Long term: -70°C; Short term: +4°C

Precautions

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

GPR68 / OGR1 Antibody (C-Terminus) - 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

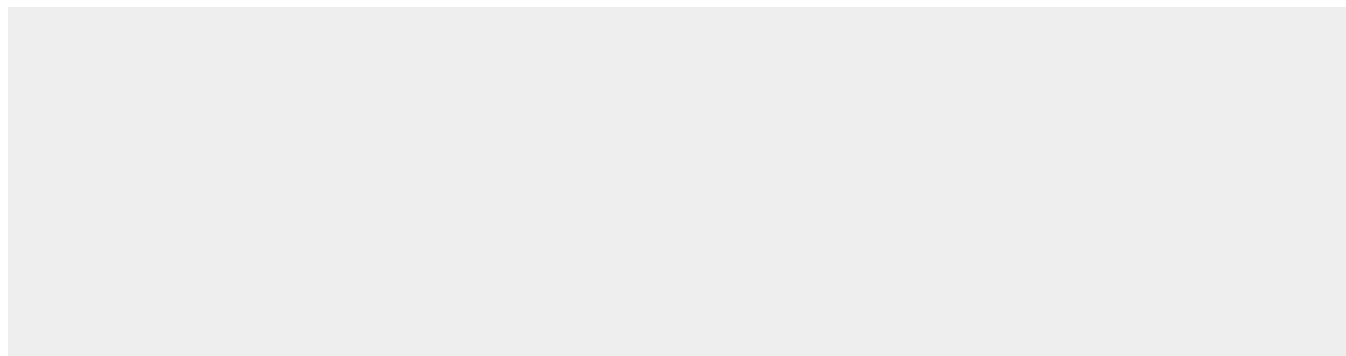
Volume

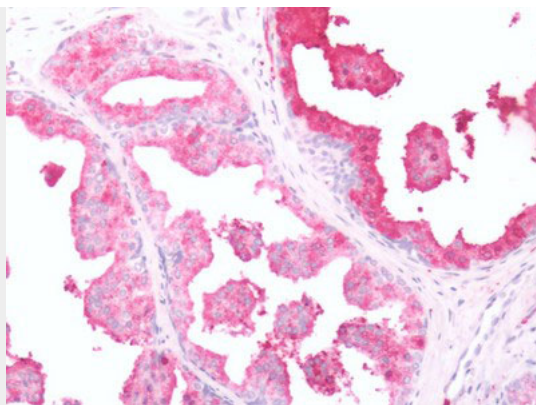
50 µl

GPR68 / OGR1 Antibody (C-Terminus) - Protocols

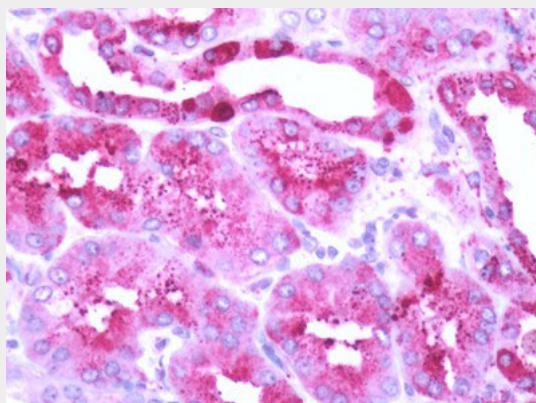
Provided below are standard protocols that you may find useful for product applications.

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

GPR68 / OGR1 Antibody (C-Terminus) - Images



Human Prostate: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Kidney: Formalin-Fixed, Paraffin-Embedded (FFPE)

GPR68 / OGR1 Antibody (C-Terminus) - Background

Proton-sensing receptor involved in pH homeostasis. May represents an osteoblastic pH sensor regulating cell-mediated responses to acidosis in bone. Mediates its action by association with G proteins that stimulates inositol phosphate (IP) production or Ca^{2+} mobilization. The receptor is almost silent at pH 7.8 but fully activated at pH 6.8. Function also as a metastasis suppressor gene in prostate cancer (By similarity).

GPR68 / OGR1 Antibody (C-Terminus) - References

- An S.,et al.FEBS Lett. 375:121-124(1995).
- Xu Y.,et al.Genomics 35:397-402(1996).
- Kaighin V.A.,et al.Submitted (JUL-2008) to the EMBL/GenBank/DDBJ databases.
- King M.M.,et al.Submitted (APR-2004) to the EMBL/GenBank/DDBJ databases.
- Heilig R.,et al.Nature 421:601-607(2003).