10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GPR68 / OGR1 Antibody (C-Terminus)

Rabbit Polyclonal Antibody
Catalog # ALS10292

Specification

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

Application	**IHC-P, ICC, E**
Primary Accession	Q15743
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**41kDa KDa**
Dilution	**IHC-P~~N/A** **ICC~~N/A** **E~~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). The receptor is almost silent at pH 7.8 but fully activated at pH 6.8 (PubMed:<a

href="http://www.uniprot.org/citations/12955148" target="_blank">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 represents 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 Cytomety
- Cell Culture

GPR68 / OGR1 Antibody (C-Terminus) - Images

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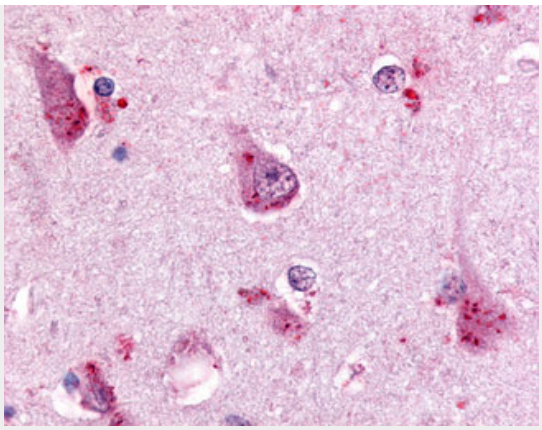

Anti-GPR68 antibody ALS10292 IHC of human brain, cortex.

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).