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GPR68 Antibody - middle region
Rabbit Polyclonal Antibody
Catalog # AI15103

Specification

GPR68 Antibody - middle region - Product Information

Application	**WB**
Primary Accession	Q15743
Other Accession	NM_003485, NP_003476
Reactivity	**Human, Mouse, Rat, Rabbit, Pig, Horse, Dog**
Predicted	**Human, Mouse, Rat, Rabbit, Pig, Horse, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**41kDa KDa**

GPR68 Antibody - middle region - Additional Information

Gene ID 8111

Alias Symbol **MGC111379, MGC156983, OGR1, GPR12A**

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

Format
Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage
Add 50 ul of distilled water. Final anti-GPR68 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions
GPR68 Antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

GPR68 Antibody - middle region - 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:<a

href="http://www.uniprot.org/citations/39753132" target="_blank">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 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

GPR68 Antibody - middle region - 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 Antibody - middle region - Images

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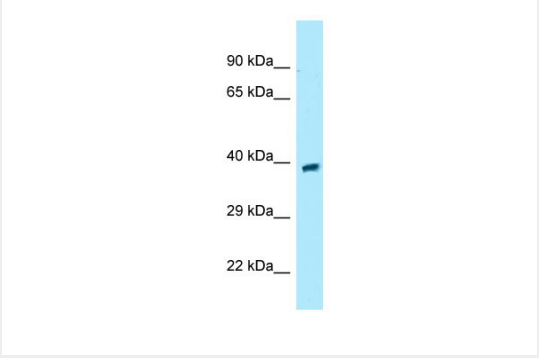

WB Suggested Anti-GPR68 Antibody Titration: 1.0 µg/ml
Positive Control: Fetal Brain

GPR68 Antibody - middle region - 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).