

Goat Anti-GPR3 Antibody

Peptide-affinity purified goat antibody Catalog # AF1494a

Specification

Goat Anti-GPR3 Antibody - Product Information

Application WB, E
Primary Accession P46089

Other Accession <u>NP_005272</u>, <u>2827</u>, <u>14748 (mouse)</u>, <u>266769 (rat)</u>

Reactivity Humar

Predicted Mouse, Rat, Dog

Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG
Calculated MW 35010

Goat Anti-GPR3 Antibody - Additional Information

Gene ID 2827

Other Names

G-protein coupled receptor 3, ACCA orphan receptor, GPR3, ACCA

Dilution

WB~~1:1000

 $E \sim N/A$

Format

0.5~mg~lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-GPR3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-GPR3 Antibody - Protein Information

Name GPR3

Synonyms ACCA

Function



Constitutively active G-protein coupled receptor that maintains high 3'-5'-cyclic adenosine monophosphate (cAMP) levels that a plays a role in serveral processes including meiotic arrest in oocytes or neuronal development via activation of numerous intracellular signaling pathways. Acts as an essential activator of thermogenic adipocytes and drives thermogenesis via its intrinsic G(s)-coupling activity without the requirement of a ligand (PubMed:34048700). Has a potential role in modulating a number of brain functions, including behavioral responses to stress (By similarity), amyloid-beta peptide generation in neurons (By similarity). Stimulates neurite outgrowth in cerebellar granular neurons modulated via PKA, ERK, and most strongly PI3K-mediated signaling pathways (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein.

Tissue Location

Expressed predominantly in the central nervous system, and at low levels in the lung, kidney, testis, ovary and eye Highly expressed in regions of the brain implicated in the Alzheimer disease

Goat Anti-GPR3 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-GPR3 Antibody - Images



AF1494a (0.3 μ g/ml) staining of Human Brain (Frontal Cortex) lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-GPR3 Antibody - References

GPR3 may not be a potential candidate gene for premature ovarian failure. Zhou S, et al. Reprod Biomed Online, 2010 Jan. PMID 20158988.

Oocyte-specific G-protein-coupled receptor 3 (GPR3): no perturbations found in 82 women with





premature ovarian failure (first report). Kovanci E, et al. Fertil Steril, 2008 Oct. PMID 17953967. The DNA sequence and biological annotation of human chromosome 1. Gregory SG, et al. Nature, 2006 May 18. PMID 16710414.

The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.

Fluid shear stress differentially regulates gpr3, gpr6, and gpr12 expression in human umbilical vein endothelial cells. Uhlenbrock K, et al. Cell Physiol Biochem, 2003. PMID 12649592.