

**Goat Anti-GALR2 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1463a****Specification**

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**Goat Anti-GALR2 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">O43603</a>
Other Accession	<a href="#">NP_003848</a> , <a href="#">8811</a> , <a href="#">14428 (mouse)</a> , <a href="#">29234 (rat)</a>
Reactivity	Human
Predicted	Mouse, Rat, Dog, Cow
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	41700

**Goat Anti-GALR2 Antibody - Additional Information****Gene ID** 8811**Other Names**

Galanin receptor type 2, GAL2-R, GALR-2, GALR2, GALNR2

**Format**

0.5 mg IgG/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-GALR2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-GALR2 Antibody - Protein Information****Name** GALR2**Synonyms** GALNR2**Function**

Receptor for the hormone galanin and GALP. Receptor for the hormone spexin-1 (PubMed:&lt;a href="http://www.uniprot.org/citations/24517231" target="\_blank"&gt;24517231&lt;/a&gt;). The activity of this receptor is mediated by G proteins that activate the phospholipase C/protein kinase C pathway (via G(q)) and that inhibit adenylyl cyclase (via G(i)).

**Cellular Location**

Cell membrane; Multi-pass membrane protein.

**Tissue Location**

Expressed abundantly within the central nervous system in both hypothalamus and hippocampus. In peripheral tissues, the strongest expression was observed in heart, kidney, liver, and small intestine

**Goat Anti-GALR2 Antibody - 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](#)

**Goat Anti-GALR2 Antibody - Images**

AF1463a (0.3 µg/ml) staining of Human Heart lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

**Goat Anti-GALR2 Antibody - Background**

Galanin is an important neuromodulator present in the brain, gastrointestinal system, and hypothalamopituitary axis. It is a 30-amino acid non-C-terminally amidated peptide that potently stimulates growth hormone secretion, inhibits cardiac vagal slowing of heart rate, abolishes sinus arrhythmia, and inhibits postprandial gastrointestinal motility. The actions of galanin are mediated through interaction with specific membrane receptors that are members of the 7-transmembrane family of G protein-coupled receptors. GALR2 interacts with the N-terminal residues of the galanin peptide. The primary signaling mechanism for GALR2 is through the phospholipase C/protein kinase C pathway (via Gq), in contrast to GALR1, which communicates its intracellular signal by inhibition of adenylyl cyclase through Gi. However, it has been demonstrated that GALR2 couples efficiently to both the Gq and Gi proteins to simultaneously activate 2 independent signal transduction pathways.

## **Goat Anti-GALR2 Antibody - References**

Identification of new putative susceptibility genes for several psychiatric disorders by association analysis of regulatory and non-synonymous SNPs of 306 genes involved in neurotransmission and neurodevelopment. Gratac<sup>3</sup>s M, et al. Am J Med Genet B Neuropsychiatr Genet, 2009 Sep 5. PMID 19086053.

Galanin decreases proliferation of PC12 cells and induces apoptosis via its subtype 2 receptor (GalR2). Tofighi R, et al. Proc Natl Acad Sci U S A, 2008 Feb 19. PMID 18272487.

Alcoholism is associated with GALR3 but not two other galanin receptor genes. Belfer I, et al. Genes Brain Behav, 2007 Jul. PMID 17083333.

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.

Galanin receptor subtype GalR2 mediates apoptosis in SH-SY5Y neuroblastoma cells. Berger A, et al. Endocrinology, 2004 Feb. PMID 14592962.