

GABRA1 Antibody (aa327-450, clone S96-55)
Mouse Monoclonal Antibody
Catalog # ALS14988**Specification**

GABRA1 Antibody (aa327-450, clone S96-55) - Product Information

Application	WB, IHC
Primary Accession	P14867
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Calculated MW	52kDa KDa

GABRA1 Antibody (aa327-450, clone S96-55) - Additional Information**Gene ID** 2554**Other Names**

Gamma-aminobutyric acid receptor subunit alpha-1, GABA(A) receptor subunit alpha-1, GABRA1

Target/Specificity

Detects ~55 kD protein.

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions

GABRA1 Antibody (aa327-450, clone S96-55) is for research use only and not for use in diagnostic or therapeutic procedures.

GABRA1 Antibody (aa327-450, clone S96-55) - Protein Information**Name** GABRA1**Function**

Ligand-gated chloride channel which is a component of the heteropentameric receptor for GABA, the major inhibitory neurotransmitter in the brain (PubMed:23909897, PubMed:25489750, PubMed:29950725). Plays an important role in the formation of functional inhibitory GABAergic synapses in addition to mediating synaptic inhibition as a GABA-gated ion channel (PubMed:23909897, PubMed:25489750). The gamma2 subunit is necessary but not sufficient for a rapid formation of active synaptic contacts and the synaptogenic effect of this subunit is influenced by the type of alpha and beta subunits present in the receptor pentamer (By similarity). The alpha1/beta2/gamma2 receptor and the alpha1/beta3/gamma2 receptor exhibit synaptogenic activity (PubMed:23909897, PubMed:25489750).

GABRA1-mediated plasticity in the orbitofrontal cortex regulates context-dependent action selection (By similarity). Functions also as histamine receptor and mediates cellular responses to histamine (By similarity).

Cellular Location

Postsynaptic cell membrane {ECO:0000250|UniProtKB:P08219}; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:P62813}

Volume

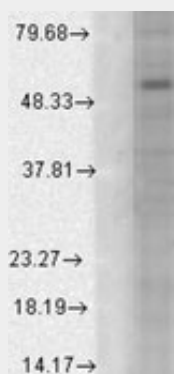
50 µl

GABRA1 Antibody (aa327-450, clone S96-55) - Protocols

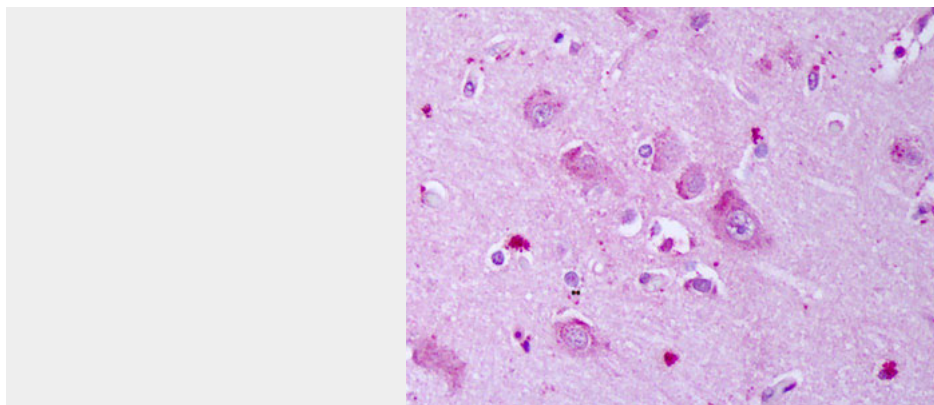
Provided below are standard protocols that you may find useful for product applications.

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

GABRA1 Antibody (aa327-450, clone S96-55) - Images



Western blot analysis of GABA(A)R Alpha1 a in a human cell line mix using a 1:1000 dilution of...



Anti-GABRB1 antibody IHC of human brain, cortex neurons.

GABRA1 Antibody (aa327-450, clone S96-55) - Background

Component of the heteropentameric receptor for GABA, the major inhibitory neurotransmitter in the vertebrate brain. Functions also as histamine receptor and mediates cellular responses to histamine. Functions as receptor for diazepam and various anesthetics, such as pentobarbital; these are bound at a separate allosteric effector binding site. Functions as ligand-gated chloride channel (By similarity).

GABRA1 Antibody (aa327-450, clone S96-55) - References

- Schofield P.R., et al. FEBS Lett. 244:361-364(1989).
- Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
- Garrett K.M., et al. Biochem. Biophys. Res. Commun. 156:1039-1045(1988).
- Lachance-Touchette P., et al. Eur. J. Neurosci. 34:237-249(2011).
- Carvill G.L., et al. Neurology 82:1245-1253(2014).