

GABA A Receptor Alpha 5 Antibody
GABA A Receptor Alpha 5 Antibody, Clone S415-24
Catalog # ASM10326

Specification

GABA A Receptor Alpha 5 Antibody - Product Information

Application	WB
Primary Accession	P31644
Other Accession	NP_000801.1
Host	Mouse
Isotype	IgG1
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Format	ATTO 488

Description

Mouse Anti-Human GABA A Receptor Alpha5 Monoclonal IgG1

Target/Specificity

Detects ~55kDa. Does not cross-react with GABA A Receptor Alpha2 or other GABA-A Receptors based on KO validation data.

Other Names

Gamma-aminobutyric acid receptor subunit alpha-5 Antibody, GABA(A) Receptor subunit Alpha-5 Antibody, Gabra5 Antibody

Immunogen

Fusion protein amino acids 368-419 (last cytoplasmic domain before extracellular C-terminus) of human GABA A Receptor Alpha5.

Purification

Protein G Purified

Storage **-20°C**

Storage Buffer

PBS pH7.4, 50% glycerol, 0.1% sodium azide

Shipping Temperature

Blue Ice or 4°C

Certificate of Analysis

A 1:100 dilution of SMC-494 was sufficient for detection of GABA-A R, Alpha5 in 20 µg of mouse brain lysate by ECL immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization

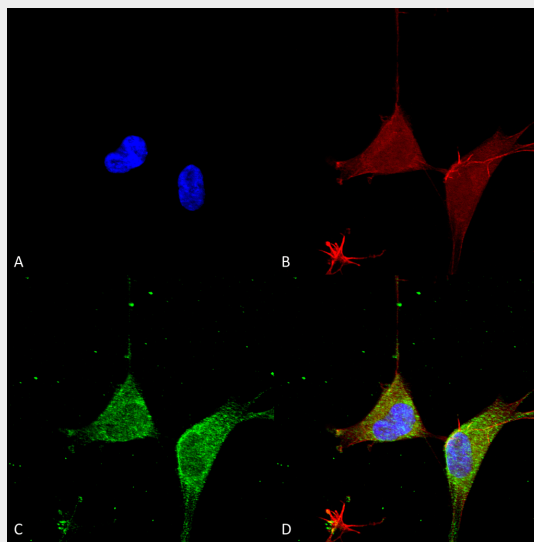
Cell Junction | Synapse | Postsynaptic Cell Membrane | Cell Membrane

GABA A Receptor Alpha 5 Antibody - Protocols

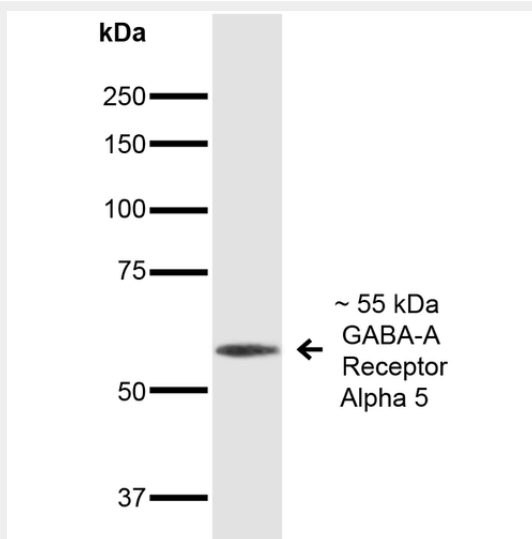
Provided below are standard protocols that you may find useful for product applications.

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

GABA A Receptor Alpha 5 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GABA A Receptor Alpha 5 Monoclonal Antibody, Clone N415/24 (ASM10326). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-GABA A Receptor Alpha 5 Monoclonal Antibody (ASM10326) at 1:50 for overnight at 4°C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) GABA A Receptor Alpha 5 Antibody (D) Composite.



Western Blot analysis of Mouse Brain showing detection of ~55 kDa GABA A Receptor Alpha 5

protein using Mouse Anti-GABA A Receptor Alpha 5 Monoclonal Antibody, Clone N415/24 (ASM10326). Lane 1: MW Ladder. Lane 2: Mouse Brain. Load: 20 µg. Primary Antibody: Mouse Anti-GABA A Receptor Alpha 5 Monoclonal Antibody (ASM10326) at 1:1000 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:200 for 1 hour at RT. Predicted/Observed Size: ~55 kDa.

GABA A Receptor Alpha 5 Antibody - Background

The GABA A Receptor is a member of the superfamily of fast acting ligand-gated ion channels. The individual subunits of these receptors have similar sequences and structural features (1). GABA-A receptors are the major fast inhibitory neurotransmitter gated ion channels in the brain (2). Recent research shows their usage in investigating side effects of drugs and the effects of learning and memory. Inverse agonists of the Alpha5 subunit may be useful in the treatment of Alzheimer's Disease (3).

GABA A Receptor Alpha 5 Antibody - References

1. Bracamontes J.R. and Steinbach J.H. (2008) J Bio Chem. 283: 26128-26136.
2. Macdonald R.L., Olsen R.W. (1993) Annu Rev Neurosci. 17: 569-602.
3. Hengen K.B., et al. (2012) PLoS One. 7(1): e30608.