

**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 **ICC/IF, WB**  
Primary Accession [P31644](#)  
Other Accession [NP\\_000801.1](#)  
Host **Mouse**  
Isotype **IgG1**  
Reactivity **Human, Mouse, Rat**  
Clonality **Monoclonal**

**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**

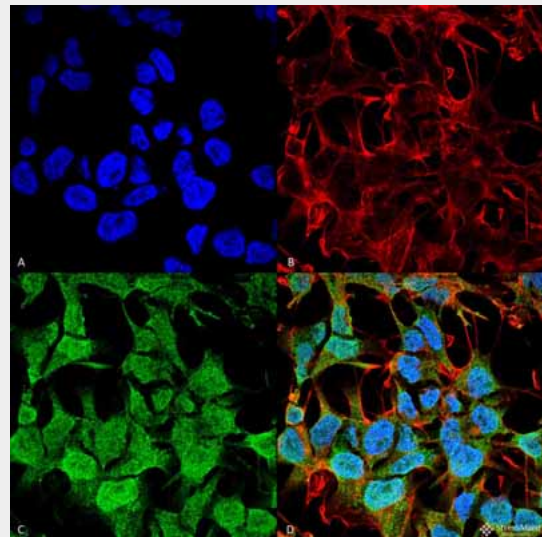
**Storage Buffer**

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

Shipping **Blue Ice or 4°C**  
Temperature

**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.



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GABA-A Receptor Alpha5 Monoclonal Antibody, Clone S415-24 (ASM10326). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-GABA-A Receptor Alpha5 Monoclonal Antibody (ASM10326) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Cell Junction, Synapse, Postsynaptic Cell Membrane, Cell Membrane. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) GABA-A Receptor Alpha5 Antibody (D) Composite.

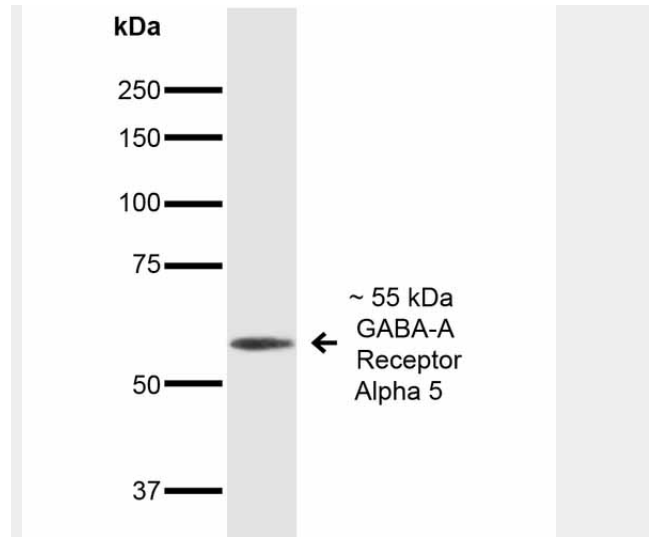
### Cellular Localization

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](#)



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 S415-24 (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.