

## Mouse GABA(A) Receptor Beta3 Monoclonal Antibody | anti-Gabrb3 antibody

GABA-A Receptor Beta3 Antibody

|                               |                      |                                        |                                                          |
|-------------------------------|----------------------|----------------------------------------|----------------------------------------------------------|
| CATALOG #<br><b>AAA103298</b> | HOST<br><b>Mouse</b> | REACTIVITY<br><b>Mouse, Human, Rat</b> | APPLICATIONS<br><b>Immunocytochemistry, Western Blot</b> |
|-------------------------------|----------------------|----------------------------------------|----------------------------------------------------------|

### PRODUCT SYNONYMS

GABA(A) Receptor Beta3; Monoclonal Antibody; GABA-A Receptor Beta3 Antibody; Gabrb3; GABA(A) receptor subunit beta3; anti-Gabrb3 antibody

### PRODUCT SPECIFICATIONS

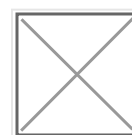
|                                                  |                                                                                                                                                                                     |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                             | Mouse                                                                                                                                                                               |
| Reactivity                                       | Mouse, Human, Rat                                                                                                                                                                   |
| Clonality                                        | Monoclonal                                                                                                                                                                          |
| Isotype                                          | IgG1                                                                                                                                                                                |
| Clone Number                                     | S87-25                                                                                                                                                                              |
| Form/Format                                      | Protein G Purified                                                                                                                                                                  |
| Concentration                                    | 1mg/mL (varies by lot)                                                                                                                                                              |
| Sequence Length                                  | 473                                                                                                                                                                                 |
| Applicable Applications for anti-Gabrb3 antibody | ICC (Immunocytochemistry), WB (Western Blot)                                                                                                                                        |
| Certificate of Analysis                          | 1ug/mL was sufficient for detection of Beta3 GABA receptor in 10ug of rat brain lysate by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody. |
| Storage Buffer                                   | PBS pH7.4, 50% glycerol, 0.09% sodium azide                                                                                                                                         |
| Preparation and Storage                          | -20 degree C                                                                                                                                                                        |

### IMAGES



#### WB (Western Blot)

Western Blot analysis of Rat brain membrane lysate showing detection of GABA A Receptor protein using Mouse Anti-GABA A Receptor Monoclonal Antibody, Clone S87-25. Load: 15 ug. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-GABA A Receptor Monoclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.



#### IHC (Immunohistochemistry)

Immunohistochemistry analysis using Mouse Anti-GABA A Receptor Monoclonal Antibody, Clone S87-25. Tissue: Brain. Species: mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-GABA A Receptor Monoclonal Antibody at 1:1000 for 1 hour at RT. Secondary Antibody: HRP/DAB Detection System: Biotinylated Goat Anti-Mouse, Streptavidin Peroxidase, DAB Chromogen (brown) for 30 minutes at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500 ul for 5 minutes at RT.

### ADDITIONAL INFORMATION

#### Related Product Information for anti-Gabrb3 antibody

**Background Info:** Detects ~55kDa. No cross-reactivity against GABA-A-R-Beta 2 or -Beta1.

**Scientific 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 (3). GABA-A receptors are the major fast inhibitory neurotransmitter gated ion channels in the brain (4).

|                                                    |                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Categories/Family for anti-Gabrb3 antibody | Ion Channels; Neuroscience                                                                                                                                                                                                                                                           |
| References                                         | 1. Hille B. (2001) Ion Channels of Excitable Membranes, 3rd Ed., Sinauer Associated Inc.: Sunderland, MA USA. 2. www.iochannels.org 3. Bracamontes J.R. and Steinbach J.H. (2008) J Bio Chem. 283: 26128-26136. 4. Macdonald R.L., Olsen R.W. (1993) Annu Rev Neurosci. 17: 569-602. |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                             |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 6679911                                                                                                                                                     |
| NCBI GeneID                      | 14402                                                                                                                                                       |
| NCBI Accession #                 | NP_032097.1                                                                                                                                                 |
| NCBI GenBank Nucleotide #        | NM_008071.3                                                                                                                                                 |
| UniProt Accession #              | P63080; P15433; Q3UHR3                                                                                                                                      |
| Molecular Weight                 | 54,166 Da                                                                                                                                                   |
| NCBI Official Full Name          | gamma-aminobutyric acid receptor subunit beta-3 isoform a                                                                                                   |
| NCBI Official Synonym Full Names | gamma-aminobutyric acid (GABA) A receptor, subunit beta 3                                                                                                   |
| NCBI Official Symbol             | Gabrb3                                                                                                                                                      |
| NCBI Official Synonym Symbols    | Cp1; beta3; Gabrb-3; AW049585; A230092K12Rik                                                                                                                |
| NCBI Protein Information         | gamma-aminobutyric acid receptor subunit beta-3; cleft palate 1; GABA(A) receptor subunit beta-3; gamma-aminobutyric acid (GABA-A) receptor, subunit beta 3 |
| UniProt Protein Name             | Gamma-aminobutyric acid receptor subunit beta-3                                                                                                             |
| UniProt Gene Name                | <b>Gabrb3</b>                                                                                                                                               |
| UniProt Synonym Gene Names       | Gabrb-3                                                                                                                                                     |
| UniProt Entry Name               | GBRB3_MOUSE                                                                                                                                                 |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.