

Product datasheet for TA386323

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

GABA A Receptor alpha 1 (GABRA1) Mouse Monoclonal Antibody [Clone ID: 1F4]

Product data:

Product Type: Primary Antibodies

Clone Name: 1F4

Reactivity: Human Host: Mouse

Isotype: IgG2b, kappa
Clonality: Monoclonal

Immunogen: This antibody was raised against α1β2γ2 GABA-A receptor.

Specificity: This antibody recognises $\alpha 1\beta 2y2$ GABA-A receptor which is found in up to 50% of the

synapses in the brain. It's ligand, GABA is a major inhibitory transmitter in the nervous system, binds to this receptor and opens a channel permeable to chloride. Disfunctions of

GABAR are found in anxiety, neurodevelopmental disorderds and epilepsy.

FSEC: High affinity and specificity of the 1F4 antibody to $\alpha 1\beta 2\gamma 2$ GABA-A receptor was demonstrated using fluorescence-detection size exclusion chromatography with GFP-tagged receptor (shift in elution volume) (Zhu et al., 2018). Crystallography: Furthermore, this antibody was utilised in production and purification of the $\alpha 1\beta 2\gamma 2$ GABA-A receptor (Zhu et

al., 2018). Finally, Fab fragments derived from the antibody were used to facilitate

crystallisation and improve stabilisation of the $\alpha 1\beta 2y2$ GABA-A receptor (Zhu et al., 2018).

Formulation: PBS with 0.02% Proclin 300.

Concentration: lot specific

Conjugation: Unconjugated

Storage: Please store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C. Avoid

freeze and thaw cycles.

Stability: 3 years from dispatch.

Gene Name: gamma-aminobutyric acid type A receptor alpha1 subunit

Database Link: Entrez Gene 2554 Human

P14867

Synonyms: ECA4; EJM; EJM5

