Human BAI2 Alexa Fluor® 594-conjugated Antibody

Recombinant Monoclonal Rabbit IgG Clone # 2528B
Catalog Number: FAB9338T
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human BAI2 in direct ELISAs.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2528B
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human embryonic kidney cell, HEK293-derived human BAI2 Phe21-Asp911 Accession # O60241-3
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10^6 cells	HEK293 Human Cell Line Transfected with Human BAI2 and eGFP

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** • 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Brain angiogenesis inhibitor 2 (BAI2), along with BAI1 and BAI3, form a subfamily of brain specific adhesion GPCRs. They are large, glycosylated molecules, approximately 180-220 kDa, and play a role in neuronal synapse formation and maintenance. Mature human BAI2 consists of a 903 amino acid (aa) N-terminal extracellular domain (ECD) containing four TSP1 domains, a hormone binding domain (HBD), a GAIN domain and a GPS protease sensitive linker, followed by a region with seven transmembrane segments and a 410 aa C-terminal cytoplasmic domain (1). Within the N-terminal ECD, human BAI2 shares 96% aa sequence identity with both mouse and rat BAI2. BAI2 is expressed primarily in neurons and astrocytes of the hippocampus and cerebral cortex in the brain (2, 3). To become functional, BAI2 might require activation by cleavage at the GPS domain (4). BAI family members are known to bind the C1q-like complement (C1qL) family via thrombospondin type 1 repeats (TSRs) which are conserved between BAI members (5). BAI2 has been shown to suppress expression of VEGF leading to increased neurogenesis in the dentate gyrus of the hippocampus (6).

References:

1. Duman, J.G. *et al.* (2016) Neural Plast. **2016**:8301737.
2. Shiratsuchi, T. *et al.* (1997) Cytogenet. Cell Genet. **79**:103.
3. Kee, H.J. *et al.* (2002) J. Cereb. Blood Flow Metab. **22**:1054.
4. Daisuke, O. *et al.* (2010) J. Recept Signal Transduct Res **30**:143.
5. Bolliger, M.F. *et al.* (2011) Proc. Natl. Acad. Sci. USA **108**:2534.
6. Jeong, B.C. *et al.* (2016) FEBS Lett **580**:669.

PRODUCT SPECIFIC NOTICES

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