



Monoclonal Anti-human BAI1 Antibody

ORDERING INFORMATION

Catalog Number: MAB4969

Clone: 542515

Lot Number: CCVJ02

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human BAI1

Immunogen: CHO cell-derived rhBAI1

Ig class: mouse IgG,

Recommended Application:
Immunohistochemistry

Other Application:
Direct ELISA

Background

Human BAI1 (brain-specific angiogenesis inhibitor 1) is a 180 kDa 7-transmembrane (TM) member of the secretin receptor family. It is synthesized by neurons and serves to negatively regulate angiogenesis. Mature BAI1 contains three distinct regions: a 106 kDa N-terminal extracellular domain (ECD) (aa 31 - 948), a 7-TM segment, and a C-terminal cytoplasmic region. The ECD contains one RGD motif (aa 231 - 233), five antiangiogenic TSP type1 repeats (aa 261 - 575), and one GPS domain (aa 880 - 938) that may be used for proteolytic cleavage. There is one alternative splice form that combines an alternate start site at Met788 with a deletion of aa 893 - 939. Over aa 31 - 879, human BAI1 is 94% aa identical to mouse BAI1.

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a rat immunized with purified, CHO cell-derived, recombinant human BAI1 (rhBAI1; aa 1 - 879; Accession # O14514). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody detects rhBAI1 in direct ELISAs. In this format, this antibody does not cross-react with rhBAI3.

Applications

Immunohistochemistry - This antibody was used at a concentration of 25 µg/mL with appropriate secondary reagents to detect BAI1 in paraffin-embedded human cerebellum tissue sections. For chromogenic detection of labeling, the use of R&D Systems Cell and Tissue Staining Kits (CTS Series) is recommended.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human BAI1. The detection limit for rhBAI1 is approximately 3 ng/well.

Optimal dilutions should be determined by each laboratory for each application.

For immunohistochemistry images, please refer to our website at <http://www.RnDSystems.com/go/ihc>.