



Monoclonal Anti-human AATK Antibody

ORDERING INFORMATION

Catalog Number: MAB4866

Clone: 456006

Lot Number: CAAD01

Size: 100 µg

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

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human AATK

Immunogen: *E. coli*-derived rhAATK

Ig class: mouse IgG_{2b}

Recommended Application:
Flow cytometry

Background

Apoptosis-associated tyrosine kinase (AATK) is a 155 kDa membrane-associated intracellular protein that promotes neurite extension and neuronal differentiation. Low extracellular potassium levels induce AATK phosphorylation and apoptosis in cerebellar granule cells. AATK negatively regulates the Na-K-2Cl cotransporter by promoting its PP1-dependent dephosphorylation. The two alternate splice forms of AATK also contain the sequences included in this immunogen. Within this region, human AATK shares 63% aa sequence identity with mouse AATK.

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, *E. coli*-derived, recombinant human AATK (rhAATK; aa 1039 - 1207; Accession # BCO47678.1). 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.**

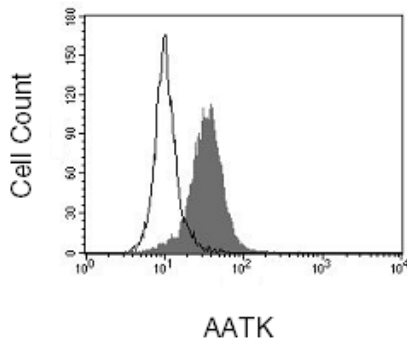
Specificity

This antibody detects rhAATK in direct ELISAs.

Application

Flow cytometry- This antibody was tested for flow cytometry using A172 cells. For intracellular staining to detect AATK, cells must first be fixed and permeabilized using 4% paraformaldehyde and 0.1% saponin in PBS. Dilute this antibody to 25 µg/mL and add 10 µL of the diluted solution to 1 - 5 x 10⁵ cells in a total reaction volume not exceeding 200 µL. The binding of unlabeled monoclonal antibodies may be visualized by adding a secondary developing reagent such as anti-mouse IgG conjugated to a fluorochrome.

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



A172 cells were stained with anti-AATK (R&D Systems, Cat. # MAB4866) or isotype control (R&D Systems, Cat. # MAB0041, open histogram) followed by PE-conjugated anti-mouse antibody (R&D Systems, Cat. # F0102B).