

ATP1B2

Cat.No. 407-0P; control peptide, 100 µg peptide (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg peptide, lyophilized. For reconstitution add 100 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. Control peptides should also be stored at -20°C when still lyophilized!
Immunogen	Synthetic peptide corresponding to AA 267 to 280 from mouse ATP1B2 (UniProt Id: P14231)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	407 002
Remarks	This control peptide consists of the synthetic peptide (AA 267 to 280 of mouse ATP1B2) that has been used for immunization. It has been tested in preadsorption experiments and blocks efficiently and specifically the corresponding signal in Western blots. The amount of peptide needed for efficient blocking depends on the titer and on the affinity of the antibody to the antigen.

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

ATP1B2 is the non-catalytic component of the sodium/potassium-transporting ATPase which catalyzes the hydrolysis of ATP coupled with the exchange of Na⁺ and K⁺ ions across the plasma membrane. The exact function of the β-2 subunit is not known. It has been shown to mediate cell adhesion of neurons and astrocytes, and to promote neurite outgrowth.

Selected General References

Hippocampal levels and activity of the sodium/potassium transporting ATPase subunit α-3 (AT1A3) are paralleling memory training in the multiple T-maze in the C57BL/6J mouse.

Heo S, Cszasz E, Jung G, Beuk T, Höger H, Lubec G
Neurochemistry international (2012) 61(5): 702-12.

An immunoaffinity-based method for isolating ultrapure adult astrocytes based on ATP1B2 targeting by the ACSA-2 antibody. Batiuk MY, de Vin F, Duqué SI, Li C, Saito T, Saido T, Fiers M, Belgard TG, Holt MG
The Journal of biological chemistry (2017) 292(21): 8874-8891.

A SINE Insertion in ATP1B2 in Belgian Shepherd Dogs Affected by Spongy Degeneration with Cerebellar Ataxia (SDCA2). Mauri N, Kleiter M, Dietschi E, Leschnik M, Högl S, Wiedmer M, Dietrich J, Henke D, Steffen F, Schuller S, Gurtner C, et al. G3 (Bethesda, Md.) (2017) 7(8): 2729-2737.