Datasheet for ABIN7601805

anti-ATP1A2 antibody (AA 46-580)

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Overview

Quantity:	100 µg
Target:	ATP1A2
Binding Specificity:	AA 46-580
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ATP1A2 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Purpose:	Anti-ATP1A2 Antibody Picoband®
Immunogen:	E.coli-derived human ATP1A2 recombinant protein (Position: L46-L580). Human ATP1A2 shares 99.1% amino acid (aa) sequence identity with mouse and rat ATP1A2.
Characteristics:	Anti-ATP1A2 Antibody Picoband® (ABIN7601805). Tested in WB, IHC, ELISA applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	ATP1A2
Alternative Name:	ATP1A2 (ATP1A2 Products)
Background:	Sodium/potassium-transporting ATPase subunit alpha-2 is a protein which in humans is encoded by the ATP1A2 gene. The protein encoded by this gene belongs to the family of P-type cation transport ATPases, and to the subfamily of Na+/K+ -ATPases. Na+/K+ -ATPase is an integral membrane protein responsible for establishing and maintaining the electrochemical gradients of Na and K ions across the plasma membrane. These gradients are essential for osmoregulation, for sodium-coupled transport of a variety of organic and inorganic molecules, and for electrical excitability of nerve and muscle. This enzyme is composed of two subunits, a large catalytic subunit (alpha) and a smaller glycoprotein subunit (beta). The catalytic subunit of Na+/K+ -ATPase is encoded by multiple genes. This gene encodes an alpha 2 subunit. Mutations in this gene result in familial basilar or hemiplegic migraines, and in a rare syndrome known as alternating hemiplegia of childhood.
Molecular Weight:	112 kDa
Gene ID:	477
UniProt:	P50993
Pathways:	Thyroid Hormone Synthesis, Proton Transport, Ribonucleoside Biosynthetic Process

Application Details

Application Notes:	Western blot, 0.25-0.5 µg/mL, Mouse, Rat Immunohistochemistry, 2-5 µg/mL, Human, Mouse, Rat ELISA, 0.1-0.5 µg/mL, - 1. Ambrosini, A., D'Onofrio, M., Grieco, G. S., Di Mambro, A., Montagna, G., Fortini, D., Nicoletti, F., Nappi, G., Sances, G., Schoenen, J., Buzzi, M. G., Santorelli, F. M., Pierelli, F. Familial basilar migraine associated with a new mutation in the ATP1A2 gene. Neurology 65: 1826-1828, 2005. 2. Ashmore, L. J., Hrizo, S. L., Paul, S. M., Van Voorhies, W. A., Beitel, G. J., Palladino, M. J. Novel mutations affecting the Na, K ATPase alpha model complex neurological diseases and implicate the sodium pump in increased longevity. Hum. Genet. 126: 431-447, 2009. 3. Bassi, M. T., Bresolin, N., Tonelli, A., Nazos, K., Crippa, F., Baschirotto, C., Zucca, C., Bersano, A., Dolcetta, D., Boneschi, F. M., Barone, V., Casari, G. A novel mutation in the ATP1A2 gene causes alternating hemiplegia of childhood. J. Med. Genet. 41: 621-628, 2004.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Adding 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.