

Datasheet for ABIN7600851
anti-ATP1A3 antibody (AA 24-583)



[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	ATP1A3
Binding Specificity:	AA 24-583
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ATP1A3 antibody is un-conjugated
Application:	ELISA, Western Blotting (WB)

Product Details

Purpose:	Anti-ATP1A3 Antibody Picoband®
Immunogen:	E.coli-derived human ATP1A3 recombinant protein (Position: D24-D583). Human ATP1A3 shares 99.8% amino acid (aa) sequence identity with both mouse and rat ATP1A3.
Characteristics:	Anti-ATP1A3 Antibody Picoband® (ABIN7600851). Tested in WB, 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:	ATP1A3
Alternative Name:	ATP1A3 (ATP1A3 Products)
Background:	Sodium/potassium-transporting ATPase subunit alpha-3 is an enzyme that in humans is encoded by the ATP1A3 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 3 subunit. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.
Molecular Weight:	90 kDa
Gene ID:	478
UniProt:	P13637
Pathways:	Thyroid Hormone Synthesis , Proton Transport , Ribonucleoside Biosynthetic Process

Application Details

Application Notes:	Western blot, 0.25-0.5 µg/mL, Mouse, Rat ELISA, 0.1-0.5 µg/mL, - 1. Allocco, A. A., Jin, S. C., Duy, P. Q., Furey, C. G., Zeng, X., Dong, W., Nelson-Williams, C., Karimy, J. K., DeSpenza, T., Hao, L. T., Reeves, B., Haider, S., Gunel, M., Lifton, R. P., Kahle, K. T. Recessive inheritance of congenital hydrocephalus with other structural brain abnormalities caused by compound heterozygous mutations in ATP1A3. <i>Front. Cellular Neurosci.</i> 13: 425, 2019. 2. Anselm, I. A., Sweadner, K. J., Gollamudi, S., Ozelius, L. J., Darras, B. T. Rapid-onset dystonia-parkinsonism in a child with a novel ATP1A3 gene mutation. <i>Neurology</i> 73: 400-401, 2009. 3. 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. <i>Hum. Genet.</i> 126: 431-447, 2009.
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 Na ₂ HPO ₄ .
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.