

Datasheet for ABIN7602303 anti-IDH3A antibody (AA 69-425)



Overview

Quantity:	100 μg
Target:	IDH3A
Binding Specificity:	AA 69-425
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This IDH3A antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF), Flow Cytometry (FACS), Immunocytochemistry (ICC)

Product Details

Purpose:	Anti-IDH3A Antibody Picoband®
Immunogen:	E.coli-derived human PAICS recombinant protein (Position: Q69-L425). Human PAICS shares 95.2% and 96.1% amino acid (aa) sequence identity with mouse and rat PAICS, respectively.
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Anti-IDH3A Antibody Picoband® (ABIN7602303). Tested in ELISA, IF, IHC, ICC, WB, Flow Cytometry 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: IDH3A

Alternative Name: IDH3A (IDH3A Products)

Background:

Synonyms: 70 kDa ribosomal protein S6 kinase 1 antibody, KS6B1_HUMAN antibody, p70 alpha antibody, P70 beta 1 antibody, p70 ribosomal S6 kinase alpha antibody, p70 ribosomal S6 kinase beta 1 antibody, p70 S6 kinase alpha antibody, P70 S6 Kinase antibody, p70 S6 kinase alpha 1 antibody, p70 S6 kinase alpha 2 antibody, p70 S6K antibody, p70 S6K-alpha antibody, p70 S6KA antibody, p70(S6K) alpha antibody, p70(S6K)-alpha antibody, p70-alpha antibody, p70-S6K 1 antibody, p70-S6K antibody, P70S6K antibody, P70S6K antibody, P70S6K antibody, P70S6K antibody, Ribosomal protein S6 kinase Deta 1 antibody, Ribosomal protein S6 kinase beta-1 antibody, Ribosomal protein S6 kinase beta-1 antibody, Ribosomal protein S6 kinase I antibody, RPS6KB1 antibody, S6K antibody, S6K-beta-1 antibody, S6K1 antibody, Serine/threonine-kinase 14 alpha antibody, Serine/threonine-protein kinase 14A antibody, STK14A antibody

Tissue Specificity: Expressed in all tissues.

Background: Isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial (IDH3a) is an enzyme that in humans is encoded by the IDH3A gene. Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). Five isocitrate dehydrogenases have been reported: three NAD(+)-dependent isocitrate dehydrogenases, which localize to the mitochondrial matrix, and two NADP(+)-dependent isocitrate dehydrogenases, one of which is mitochondrial and the other predominantly cytosolic. NAD(+)-dependent isocitrate dehydrogenases catalyze the allosterically regulated rate-limiting step of the tricarboxylic acid cycle. Each isozyme is a heterotetramer that is composed of two alpha subunits, one beta subunit, and one gamma subunit. The protein encoded by this gene is the alpha subunit of one isozyme of NAD(+)-dependent isocitrate dehydrogenase.

Molecular Weight: 37 kDa

Gene ID: 3419

UniProt: P50213

Application Details

Ann	lication	Notes:
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Western blot, 0.25-0.5 µg/mL, Human, Mouse, Rat

Immunohistochemistry, 2-5 µg/mL, Human, Rat

Immunocytochemistry/Immunofluorescence, 5 µg/mL, Human

Immunofluorescence, 5 µg/mL, Human

Flow Cytometry (Fixed), 1-3 µg/1x10⁶ cells, Human

ELISA, 0.1-0.5 μg/mL, -

1. Fattal-Valevski, A., Eliyahu, H., Fraenkel, N. D., Elmaliach, G., Hausman-Kedem, M., Shaag, A., Mandel, D., Pines, O., Elpeleg, O. Homozygous mutation, p.Pro304His, in IDH3A, encoding isocitrate dehydrogenase subunit is associated with severe encephalopathy in infancy.

Neurogenetics 18: 57-61, 2017. 2. Findlay, A. S., Carter, R. N., Starbuck, B., McKie, L., Novakova, K., Budd, P. S., Keighren, M. A., Marsh, J. A., Cross, S. H., Simon, M. M., Potter, P. K., Morton, N. M., Jackson, I. J. Mouse Idh3a mutations cause retinal degeneration and reduced mitochondrial

function. Dis. Model. Mech. 11: dmm036426, 2018. Note: Electronic Article. 3. Grzeschik, K.-H. Assignment of a gene for human mitochondrial isocitrate dehydrogenase (ICD-M, EC 1.1.1.41.)

to chromosome 15. Hum. Genet. 34: 23-28, 1976.

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.	