

Datasheet for ABIN5693108
anti-DYRK1A antibody (AA 38-269)



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1 Image

Overview

Quantity:	100 µg
Target:	DYRK1A
Binding Specificity:	AA 38-269
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This DYRK1A antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Purpose:	Anti-DYRK1A Antibody Picoband®
Immunogen:	E. coli-derived human DYRK1A recombinant protein (Position: H38-M269).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-DYRK1A Antibody Picoband® (ABIN5693108). Tested in ELISA, IF, ICC, WB applications. This antibody reacts with Human, 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.

Target Details

Target:	DYRK1A
Alternative Name:	DYRK1A (DYRK1A Products)
Background:	Synonyms: Dual specificity tyrosine-phosphorylation-regulated kinase 1A Tissue Specificity: Ubiquitous. Highest levels in skeletal muscle, testis, fetal lung and fetal kidney. Background: Dual specificity tyrosine-phosphorylation-regulated kinase 1A is an enzyme that in humans is encoded by the DYRK1A gene. This gene encodes a member of the Dual-specificity tyrosine phosphorylation-regulated kinase (DYRK) family. This member contains a nuclear targeting signal sequence, a protein kinase domain, a leucine zipper motif, and a highly conservative 13-consecutive-histidine repeat. It catalyzes its autophosphorylation on serine/threonine and tyrosine residues. It may play a significant role in a signaling pathway regulating cell proliferation and may be involved in brain development. This gene is a homolog of <i>Drosophila mnb</i> (minibrain) gene and rat <i>Dyrk</i> gene. It is localized in the Down syndrome critical region of chromosome 21, and is considered to be a strong candidate gene for learning defects associated with Down syndrome. Alternative splicing of this gene generates several transcript variants differing from each other either in the 5' UTR or in the 3' coding region. These variants encode at least five different isoforms.
Molecular Weight:	100 kDa
Gene ID:	1859
UniProt:	Q13627
Pathways:	Mitotic G1-G1/S Phases

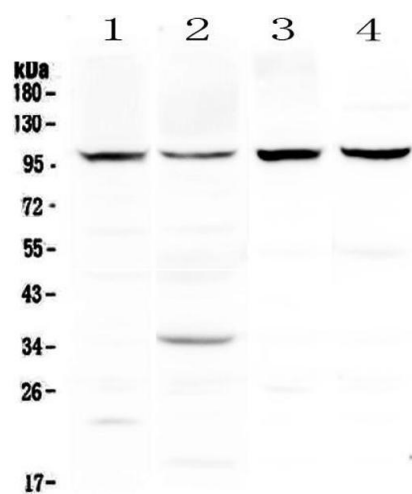
Application Details

Application Notes:	Western blot, 0.1-0.5 µg/mL Immunocytochemistry/Immunofluorescence, 5 µg/mL ELISA, 0.1-0.5 µg/mL 1. Altafaj, X., Dierssen, M., Baamonde, C., Marti, E., Visa, J., Guimera, J., Oset, M., Gonzalez, J. R., Florez, J., Fillat, C., Estivill, X. Neurodevelopmental delay, motor abnormalities and cognitive deficits in transgenic mice overexpressing Dyrk1A (minibrain), a murine model of Down's syndrome. <i>Hum. Molec. Genet.</i> 10: 1915-1923, 2001. 2. Canzonetta, C., Mulligan, C., Deutsch, S., Ruf, S., O'Doherty, A., Lyle, R., Borel, C., Lin-Marq, N., Delom, F., Groet, J., Schnappauf, F., De Vita, S., and 12 others. DYRK1A-dosage imbalance perturbs NRSF/REST levels, deregulating pluripotency and embryonic stem cell fate in Down syndrome. <i>Am. J. Hum. Genet.</i> 83: 388-400,
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Application Details

	2008.
Restrictions:	For Research Use only
Handling	
Format:	Lyophilized
Reconstitution:	Add 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 and 0.2 mg Na2HPO4.
Storage:	4 °C,-20 °C
Storage Comment:	Store 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 freeze-thaw cycles.

Images



Western Blotting

Image 1. Western blot analysis of DYRK1A using anti-DYRK1A antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human MCF-7 whole cell lysates, Lane 3: rat skeletal muscle tissue lysates, Lane 4: mouse skeletal muscle tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-DYRK1A antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is

developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for DYRK1A at approximately 100KD. The expected band size for DYRK1A is at 85KD.