

Product datasheet for TA500736AM

OriGene Technologies, Inc.

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IDH3A Mouse Monoclonal Antibody (Biotin conjugated) [Clone ID: OTI5D2]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI5D2
Applications: IF, WB

Reactivity: WB 1:500, IF 1:100 **Human, Mouse, Rat**

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human IDH3A (NP_005521) produced in HEK293T

cell.

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 0.5 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Biotin

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 36.6 kDa

Gene Name: isocitrate dehydrogenase (NAD(+)) 3 catalytic subunit alpha

Database Link: NP 005521

Entrez Gene 67834 MouseEntrez Gene 114096 RatEntrez Gene 3419 Human

P50213





Background:

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. [provided by RefSeq]

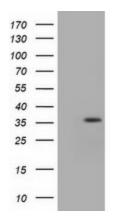
Synonyms:

H-IDH alpha; isocitrate dehydrogenase (NAD+) alpha chain; isocitrate dehydrogenase 3 (NAD+) a; isocitrate dehydrogenase [NAD] subunit alpha; isocitric dehydrogenase; mitochondrial; NAD(H)-specific isocitrate dehydrogenase alpha subunit; NAD+-specific ICDH

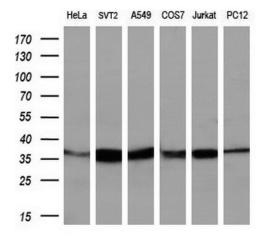
Protein Pathways:

Citrate cycle (TCA cycle), Metabolic pathways

Product images:

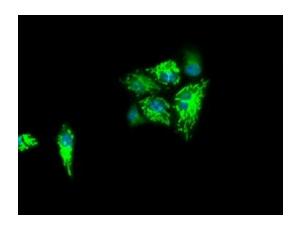


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY IDH3A ([RC200313], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-IDH3A. Positive lysates [LY401698] (100ug) and [LC401698] (20ug) can be purchased separately from OriGene.



Western blot analysis of extracts (10ug) from 6 different cell lines by using anti-IDH3A monoclonal antibody (1:200).





Anti-IDH3A mouse monoclonal antibody ([TA500736]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY IDH3A ([RC200313]).