

Product datasheet for **CF500739**

IDH3A Mouse Monoclonal Antibody [Clone ID: OTI2F11]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI2F11
Applications:	FC, IF, WB
Recommended Dilution:	WB 1:2000, IF 1:100, Flow 1:100
Reactivity:	Human, Dog, Mouse, Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human IDH3A (NP_005521) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	39.6 kDa
Gene Name:	isocitrate dehydrogenase (NAD(+)) 3 catalytic subunit alpha
Database Link:	NP_005521 Entrez Gene 67834 Mouse Entrez Gene 114096 Rat Entrez Gene 479066 Dog Entrez Gene 3419 Human P50213



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Background:

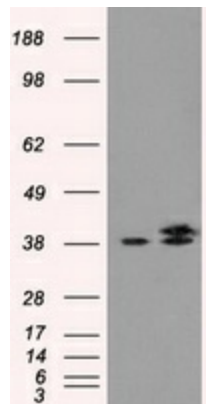
Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). Five isocitrate dehydrogenases have been reported: three NAD(+)-dependent isocitrate 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.

Synonyms:

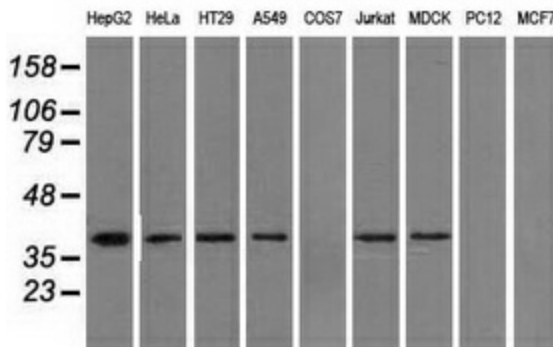
H-IDH alpha; isocitrate dehydrogenase (NAD+) alpha chain; isocitrate dehydrogenase 3 (NAD+) a; isocitrate dehydrogenase [NAD] subunit alpha; isocitric dehydrogenase; mitochondrial; NAD(H)-specific isocitrate dehydrogenase alpha subunit; NAD+-specific ICDH

Protein Pathways:

Citrate cycle (TCA cycle), Metabolic pathways

Product images:


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY IDH3A (Cat# [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 (Cat# [TA500739]). Positive lysates [LY401698] (100ug) and [LC401698] (20ug) can be purchased separately from OriGene.



Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-IDH3A monoclonal antibody.

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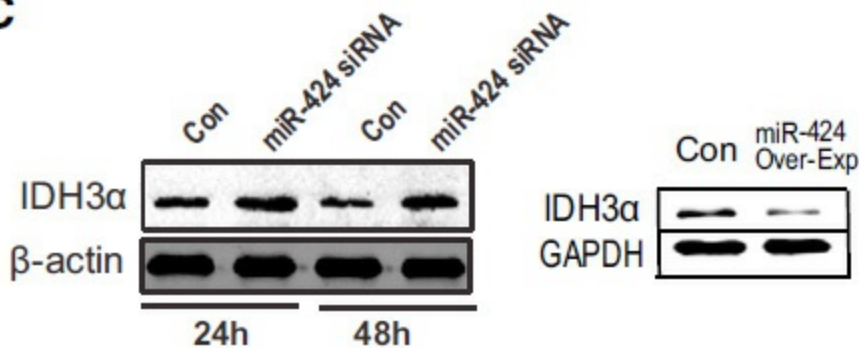
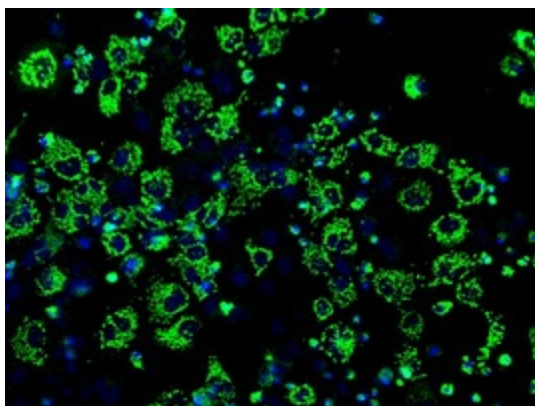
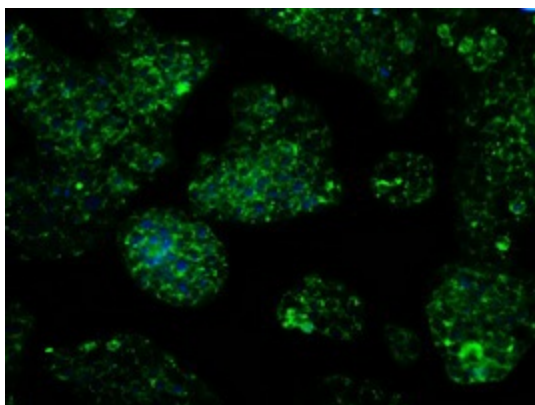


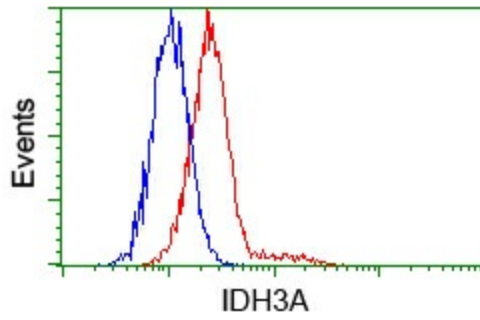
Figure from citation: Western blot analysis of IDH3A protein level by using anti-IDH3A antibody in fibroblasts with miR-424 knockdown or overexpression, and in TGF- β 1-treated fibroblasts with or without miR-424 depletion. [View Citation](#)



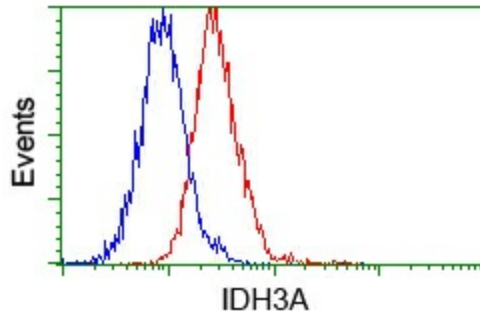
Anti-IDH3A mouse monoclonal antibody ([TA500739]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY IDH3A ([RC200313]).



Immunofluorescent staining of HepG2 cells using anti-IDH3A mouse monoclonal antibody ([TA500739]).



Flow cytometric analysis of HeLa cells, using anti-IDH3A antibody ([TA500739]), (Red) compared to a nonspecific negative control antibody (TA50011) (Blue).



Flow cytometric analysis of Jurkat cells, using anti-IDH3A antibody ([TA500739]), (Red) compared to a nonspecific negative control antibody (TA50011) (Blue).