ARG42154
anti-IDH3A antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes IDH3A
Tested Reactivity	Hu, Ms
Predict Reactivity	Cow, Rat, Dog, Gpig, Hrs, Rb, Zfsh
Tested Application	ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	IDH3A
Species	Human
Immunogen	Synthetic peptide around the N-terminal region of Human IDH3A. (within the following region: MKIFD AAKAP IQWEE RNVTA IQGPG GKWMI PSEAK ESMDK NKMGL KGPLK)
Conjugation	Un-conjugated
Alternate Names	Isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial; EC 1.1.1.41; NAD; Isocitric dehydrogenase subunit alpha; +

Application Instructions

Predict Reactivity Note	Predicted Homology Based on Immunogen Sequence: Cow: 100%; Dog: 100%; Guinea pig: 100%; Horse: 100%; Rabbit: 100%; Rat: 100%; Zebrafish: 92%

Application table

Application	Dilution
ICC/IF	Assay-dependent
IHC-P	4 - 8 µg/ml
IP	1:200
WB	1 µg/ml

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	HepG2
Observed Size	~ 38 - 40 kDa

Properties

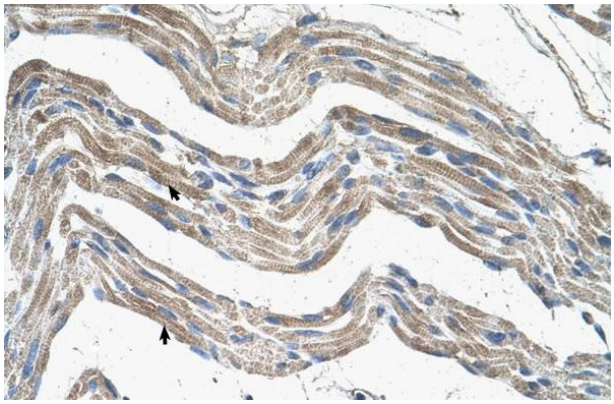
Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.09% (w/v) Sodium azide and 2% Sucrose.

Preservative	0.09% (w/v) Sodium azide
Stabilizer	2% Sucrose
Concentration	Batch dependent: 0.5 - 1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

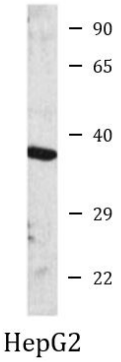
Gene Symbol	IDH3A
Gene Full Name	isocitrate dehydrogenase 3 (NAD+) alpha
Background	Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). 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, Jul 2008]
Function	Catalytic subunit of the enzyme which catalyzes the decarboxylation of isocitrate (ICT) into alpha-ketoglutarate. The heterodimer composed of the alpha (IDH3A) and beta (IDH3B) subunits and the heterodimer composed of the alpha (IDH3A) and gamma (IDH3G) subunits, have considerable basal activity but the full activity of the heterotetramer (containing two subunits of IDH3A, one of IDH3B and one of IDH3G) requires the assembly and cooperative function of both heterodimers. [UniProt]
Calculated Mw	40 kDa
Cellular Localization	Mitochondrion. [UniProt]

Images



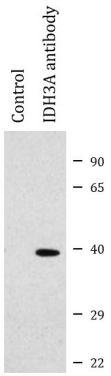
ARG42154 anti-IDH3A antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human skeletal muscle tissue stained with ARG42154 anti-IDH3A antibody at 4 - 8 µg/ml dilution.



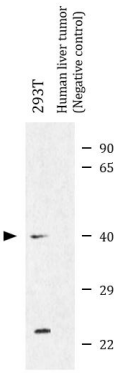
ARG42154 anti-IDH3A antibody WB image

Western blot: HepG2 cell lysate stained with ARG42154 anti-IDH3A antibody at 1 µg/ml dilution.



ARG42154 anti-IDH3A antibody IP image

Immunoprecipitation: 2 mg of HEK293 whole cell lysate were immunoprecipitated (1:200) and stained with ARG42154 anti-IDH3A antibody at 1:1000 dilution.



ARG42154 anti-IDH3A antibody WB image

Western blot: 25 µg of 293T and Human liver tumor (Negative control) lysates stained with ARG42154 anti-IDH3A antibody at 5 µg/ml dilution.