

ARG42179 anti-IDH3G antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes IDH3G
Tested Reactivity	Hu, Rat, Pig
Predict Reactivity	Ms, Cow, Dog
Tested Application	IHC-P, WB
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	IDH3G
Species	Human
Immunogen	Synthetic peptide around the internal region of Human IDH3G. (C-DHLKLHSYATSIRK) (NP_004126.1; NP_777358.1)
Conjugation	Un-conjugated
Alternate Names	NAD; Isocitric dehydrogenase subunit gamma; +; Isocitrate dehydrogenase [NAD] subunit gamma, mitochondrial; EC 1.1.1.41; H-IDHG

Application Instructions

Application table	Application	Dilution
	IHC-P	5 µg/ml
	WB	0.5 - 2 µg/ml
Application Note	WB: Recommend incubate at RT for 1h. IHC-P: Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	MCF7, Rat heart and Pig heart	
Observed Size	~ 40 kDa	

Properties

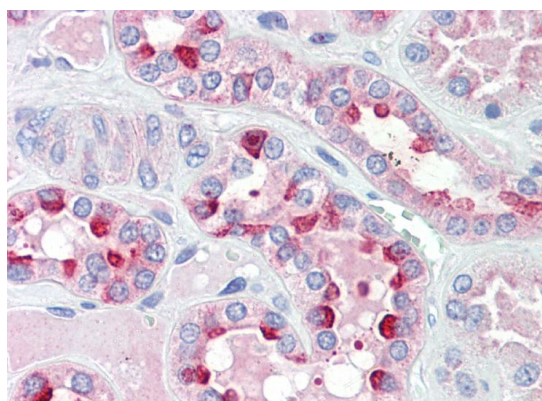
Form	Liquid
Purification	Affinity purified
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA

Concentration	0.5 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

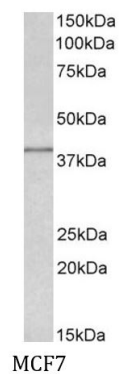
Gene Symbol	IDH3G
Gene Full Name	isocitrate dehydrogenase 3 (NAD+) gamma
Background	Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). 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 gamma subunit of one isozyme of NAD(+)-dependent isocitrate dehydrogenase. This gene is a candidate gene for periventricular heterotopia. Several alternatively spliced transcript variants of this gene have been described, but only some of their full length natures have been determined. [provided by RefSeq, Jul 2008]
Function	Regulatory subunit which plays a role in the allosteric regulation of the enzyme catalyzing 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	43 kDa
Cellular Localization	Mitochondrion. [UniProt]

Images



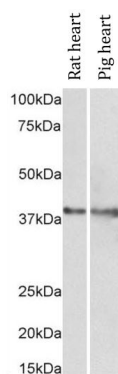
ARG42179 anti-IDH3G antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human kidney tissue. Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). The tissue section was stained with ARG42179 anti-IDH3G antibody at 5 µg/ml dilution followed by AP-staining.



ARG42179 anti-IDH3G antibody WB image

Western blot: 35 µg of MCF7 cell lysate (in RIPA buffer) stained with ARG42179 anti-IDH3G antibody at 0.5 µg/ml dilution and incubated at RT for 1 hour.



ARG42179 anti-IDH3G antibody WB image

Western blot: 35 µg of Rat heart and Pig heart lysate (in RIPA buffer) stained with ARG42179 anti-IDH3G antibody at 1 µg/ml dilution and incubated at RT for 1 hour.