ARG64252
anti-DIO2 antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes DIO2
Tested Reactivity	Hu, Ms
Predict Reactivity	Pig, Rat
Tested Application	FACS, ICC/IF, IHC-Fr
Specificity	This antibody is expected to recognise both reported isoform a (NP_000784.2 and NP_054644.1) and isoform b (NP_001007024.1).
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	DIO2
Species	Human
Immunogen	EVKKHQNQEDRC
Conjugation	Un-conjugated
Alternate Names	EC 1.97.1.10; TXDI2; 5DII; SelY; DIOII; Type-II 5'-deiodinase; Type 2 DI; D2; Type II iodothyronine deiodinase

Application Instructions

Application table

Application	Dilution
FACS	10 µg/ml
ICC/IF	10 µg/ml
IHC-Fr	2 - 3 µg/ml

Application Note: IHC-P: Antigen Retrieval: Microwaved tissue section in Citrate buffer (pH 4.5).
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

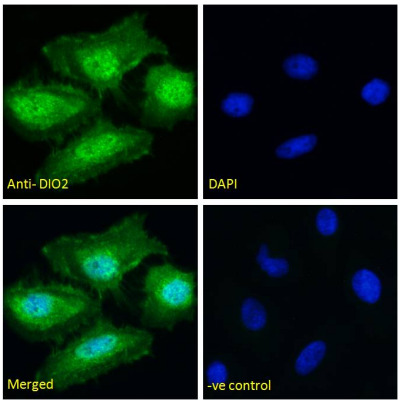
Form	Liquid
Purification	Purified from goat serum by antigen affinity chromatography.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml

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

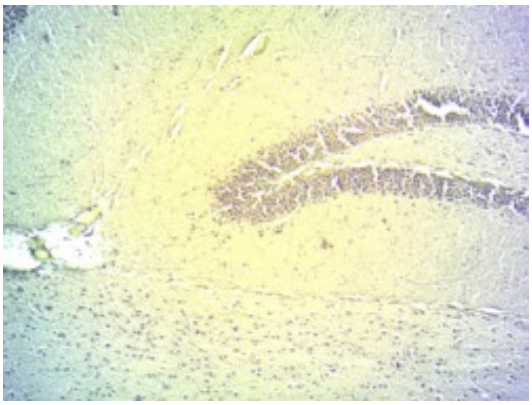
Database links	GeneID: 13371 Mouse GeneID: 1734 Human Swiss-port # Q92813 Human Swiss-port # Q9Z1Y9 Mouse
Background	The protein encoded by this gene belongs to the iodothyronine deiodinase family. It activates thyroid hormone by converting the prohormone thyroxine (T4) by outer ring deiodination (ORD) to bioactive 3,3',5-triiodothyronine (T3). It is highly expressed in the thyroid, and may contribute significantly to the relative increase in thyroidal T3 production in patients with Graves disease and thyroid adenomas. This protein contains selenocysteine (Sec) residues encoded by the UGA codon, which normally signals translation termination. The 3' UTR of Sec-containing genes have a common stem-loop structure, the sec insertion sequence (SECIS), which is necessary for the recognition of UGA as a Sec codon rather than as a stop signal. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]
Research Area	Cancer antibody; Metabolism antibody; Neuroscience antibody; Signaling Transduction antibody
Calculated Mw	31 kDa
PTM	Ubiquitinated by MARCH6, leading to its degradation by the proteasome. Deubiquitinated by USP20 and USP33.

Images



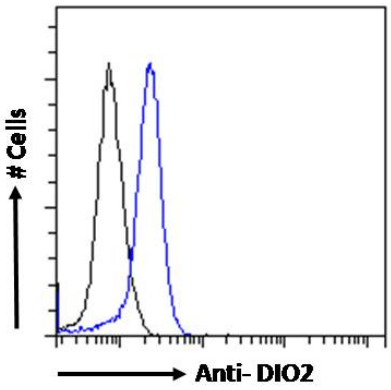
ARG64252 anti-DIO2 antibody ICC/IF image

Immunofluorescence: Paraformaldehyde fixed HeLa cells permeabilized with 0.15% Triton. Cells were stained with ARG64252 anti-DIO2 antibody (green) at 10 µg/ml dilution for 1 hour. DAPI (blue) for nuclear staining. Negative control: Unimmunized goat IgG (green) at 10 µg/ml dilution.



ARG64252 anti-DIO2 antibody IHC image

Immunohistochemistry PFA-fixed cryo-sectioned Mouse Hippocampus stained with ARG64252 anti-DIO2 antibody (2µg/ml). Microwaved antigen retrieval with citrate buffer pH 4.5, HRP-staining.



ARG64252 anti-DIO2 antibody FACS image

Flow Cytometry: Paraformaldehyde-fixed MCF7 cells permeabilized with 0.5% Triton. Cells were stained with ARG64252 anti-DIO2 antibody (blue line) at 10 µg/ml dilution for 1 hour, followed by incubation with Alexa FluorR 488 labelled secondary antibody. IgG control: Unimmunized goat IgG (black line).