

DIO2 polyclonal antibody

Catalog # PAB7542 Size 100 ug

Applications



Immunohistochemistry (Frozen sections)

DIO2 polyclonal antibody (Cat # PAB7542, 2 ug/mL) staining of PFA-fixed cryo-sectioned mouse hippocampus. Microwaved antigen retrieval with citrate buffer pH 4.5, HRP-staining.

Specification

Product Description	Goat polyclonal antibody raised against synthetic peptide of DIO2.
Immunogen	A synthetic peptide corresponding to human DIO2.
Sequence	EVKKHQEQEDRC
Host	Goat
Theoretical MW (kDa)	30.5, 34.6
Reactivity	Mouse
Specificity	This antibody is expected to recognize both reported isoform a (NP_000784.2 and NP_054644.1) and isoform b (NP_001007024.1).
Form	Liquid
Purification	Antigen affinity purification
Concentration	0.5 mg/mL
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.

Recommend Usage	ELISA (1:128000) Immunohistochemistry (Frozen sections) (2-3 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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- Enzyme-linked Immunoabsorbent Assay

Gene Info — DIO2

Entrez GeneID	1734
Protein Accession#	NP_000784.2 ; NP_054644.1 ; NP_001007024.1
Gene Name	DIO2
Gene Alias	5DII, D2, SelY, TXDI2
Gene Description	deiodinase, iodothyronine, type II
Omim ID	601413
Gene Ontology	Hyperlink
Gene Summary	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]

Other Designations

thyroxine deiodinase, type III|type 2 iodothyronine deiodinase|type-II 5'deiodinase

Publication Reference

- [Ala92 type 2 deiodinase allele increases risk for the development of hypertension.](#)

Gumieniak O, Perlstein TS, Williams JS, Hopkins PN, Brown NJ, Raby BA, Williams GH.

Hypertension 2007 Mar; 49(3):461.

Disease

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