



Anti-DIO1 monoclonal antibody (DCABH-11282)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description The protein encoded by this gene is a thiol-requiring propylthiouracil-sensitive oxidoreductase. It activates thyroid hormone by converting the prohormone thyroxine (T4) by outer ring deiodination (ORD) to bioactive 3,3',5'-triiodo-L-thyronine (T3). It also degrades both hormones by inner ring deiodination (IRD). Alternative splicing results in multiple transcript variants encoding different isoforms. Some, but not all, isoforms contain a selenocysteine (Sec) residue 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. Additional transcript variants have been described but are not supported by experimental evidence.

Immunogen	A synthetic peptide of human DIO1 is used for rabbit immunization.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Purification	Protein A
Conjugate	Unconjugated
Applications	Western Blot (Transfected lysate); ELISA
Buffer	In 1x PBS, pH 7.4
Preservative	None
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	DIO1 deiodinase, iodothyronine, type I [Homo sapiens]
Official Symbol	DIO1
Synonyms	DIO1; deiodinase, iodothyronine, type I; TXDI1; type I iodothyronine deiodinase; DIOI; type 1 DI; type-I 5-deiodinase; thyroxine deiodinase type I (selenoprotein); 5DI; MGC130050; MGC130051;
Entrez Gene ID	1733
Protein Refseq	NP_000783
UniProt ID	P49895
Chromosome Location	1p33-p32
Pathway	Amine-derived hormones, organism-specific biosystem; Metabolism, organism-specific biosystem; Metabolism of amino acids and derivatives, organism-specific biosystem; Regulation of thyroid hormone activity, organism-specific biosystem; Selenium Metabolism and Selenoproteins, organism-specific biosystem; Selenium Pathway, organism-specific biosystem; Thyroxine biosynthesis, organism-specific biosystem.
Function	selenium binding; thyroxine 5-deiodinase activity;