



Anti-DIO3 (aa 250-300) polyclonal antibody (DPAB-DC1491)

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

PRODUCT INFORMATION

Antigen Description	The protein encoded by this intronless gene belongs to the iodothyronine deiodinase family. It catalyzes the inactivation of thyroid hormone by inner ring deiodination of the prohormone thyroxine (T4) and the bioactive hormone 3,3,5-triiodothyronine (T3) to inactive metabolites, 3,3,5-triiodothyronine (RT3) and 3,3-diiodothyronine (T2), respectively. This enzyme is highly expressed in the pregnant uterus, placenta, fetal and neonatal tissues, suggesting that it plays an essential role in the regulation of thyroid hormone inactivation during embryological development. It contains a selenocysteine (Sec) residue, which is essential for efficient enzyme activity. The selenocysteine is 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.
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Immunogen	A synthetic peptide corresponding to amino acids 250-300 of rat Dio3.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Mouse, Rat
Conjugate	Unconjugated
Applications	WB (Tissue lysate),
Format	Liquid
Size	100 µl
Buffer	In PBS (30% glycerol, 0.1% sodium azide)

Preservative	0.1% Sodium Azide
Storage	Store at 4°C for short term. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	Dio3 deiodinase, iodothyronine, type III [Rattus norvegicus (Norway rat)]
Official Symbol	DIO3
Synonyms	DIO3; deiodinase, iodothyronine, type III; 5DIII; DIOIII; type III iodothyronine deiodinase; type 3 DI; type-III 5-deiodinase; deiodinase, iodothyronine, type 3;
Entrez Gene ID	29475
Protein Refseq	NP_058906
UniProt ID	P49897
Chromosome Location	chromosome: 6
Pathway	Selenium metabolism Selenoproteins;
Function	thyroxine 5-deiodinase activity;