

## Product datasheet for **AP51263PU-N**

### DIO3 (C-term) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>ELISA:</b> 1/1000. <b>Western Blot:</b> 1/100-1/500. <b>Immunohistochemistry on Paraffin Sections:</b> 1/50-1/100.
Reactivity:	Human
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	KLH conjugated synthetic peptide between 249~278 amino acids from the C-terminal region of human DIO3
Specificity:	This antibody recognizes Human DIO3 (C-term).
Formulation:	PBS State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.09% Sodium Azide
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein A
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	deiodinase, iodothyronine, type III
Database Link:	<a href="#">Entrez Gene 1735 Human P55073</a>



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**Background:**

DIO3 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. This protein 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.

**Synonyms:**

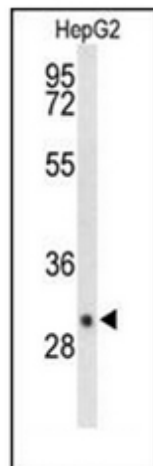
ITDI3, TXDI3, Type 3 DI, DIOIII, 5DIII

**Note:**

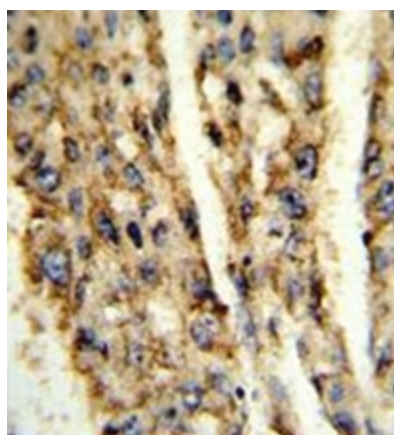
**Molecular Weight:** 31451 Da

**Protein Families:**

Druggable Genome

**Product images:**

Western blot analysis of DIO3 Antibody (C-term) in HepG2 cell line lysates (35ug/lane). DIO3 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with DIO3 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining.