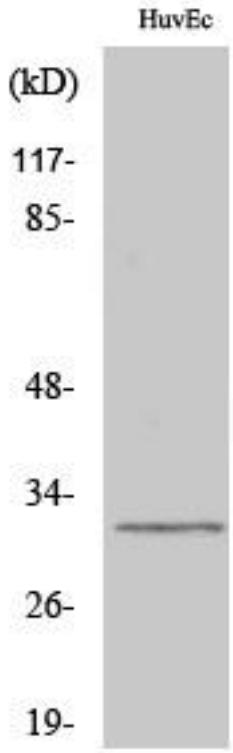
DIO3 Monoclonal Antibody

Catalog No	YP-mAb-02622
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	DIO3
Protein Name	Type III iodothyronine deiodinase
Immunogen	The antiserum was produced against synthesized peptide derived from human DIO3. AA range:17-66
Specificity	DIO3 Monoclonal Antibody detects endogenous levels of DIO3 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	DIO3; ITDI3; TXDI3; Type III iodothyronine deiodinase; 5DIII; DIOIII; Type 3 DI; Type-III 5'-deiodinase
Observed Band	31kD
Cell Pathway	Cell membrane ; Single-pass type II membrane protein . Endosome membrane ; Single-pass type II membrane protein .
Tissue Specificity	Expressed in placenta and several fetal tissues.
Function	catalytic activity:3,3',5'-triiodo-L-thyronine + iodide + A + H(+) = L-thyroxine + AH(2).,function:Responsible for the deiodination of T4 (3,5,3',5'-tetraiodothyronine) into RT3 (3,3',5'-triiodothyronine) and of T3 (3,5,3'-triiodothyronine) into T2 (3,3'-diiodothyronine). RT3 and T2 are inactive metabolites. May play a role in preventing premature exposure of developing fetal tissues to adult levels of thyroid hormones. Can regulate circulating fetal thyroid hormone concentrations throughout gestation. Essential role for regulation of thyroid hormone inactivation during embryological development.,function:Responsible for the deiodination of T4 (3,5,3',5'-tetraiodothyronine).,similarity:Belongs to the iodothyronine deiodinase family.,tissue specificity:Expressed in placenta and several fetal tissues.,
Background	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 pregnant uterus, placenta, fetal and neonatal tissues, and thought to prevent premature exposure of developing fetal tissues to adult levels of thyroid hormones. It regulates circulating fetal thyroid hormone concentrations, and thus plays a critical role in mammalian development. Knockout mice lacking this gene exhibit abnormalities related to development and reproduction, and increased activity of this enzyme in infants with hemangiomas causes severe hypothyroidism. This protei
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using DIO3 Monoclonal Antibody