

## DIO3 Polyclonal Antibody

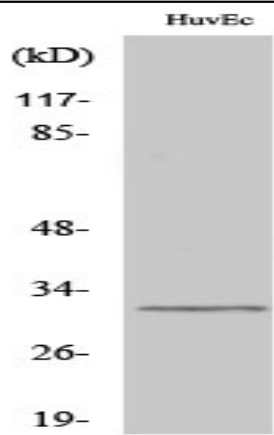
<b>Catalog No :</b>	YT1352
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;ELISA
<b>Target :</b>	DIO3
<b>Fields :</b>	>>Thyroid hormone signaling pathway
<b>Gene Name :</b>	DIO3
<b>Protein Name :</b>	Type III iodothyronine deiodinase
<b>Human Gene Id :</b>	1735
<b>Human Swiss Prot No :</b>	P55073
<b>Mouse Gene Id :</b>	107585
<b>Mouse Swiss Prot No :</b>	Q91ZI8
<b>Rat Gene Id :</b>	29475
<b>Rat Swiss Prot No :</b>	P49897
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human DIO3. AA range:17-66
<b>Specificity :</b>	DIO3 Polyclonal Antibody detects endogenous levels of DIO3 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.

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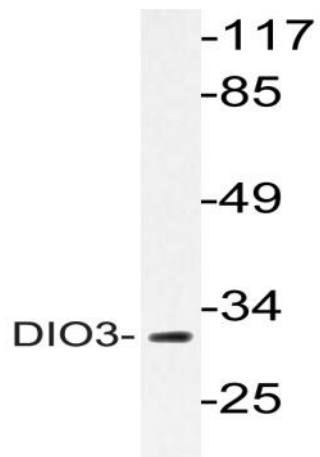
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	31kD
<b>Background :</b>	<p>The protein 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</p>
<b>Function :</b>	<p>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.,</p>
<b>Subcellular Location :</b>	Cell membrane ; Single-pass type II membrane protein . Endosome membrane ; Single-pass type II membrane protein .
<b>Expression :</b>	Expressed in placenta and several fetal tissues.

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## Products Images



Western Blot analysis of various cells using DIO3 Polyclonal Antibody



Western blot analysis of lysate from HUVEC cells, using DIO3 antibody.