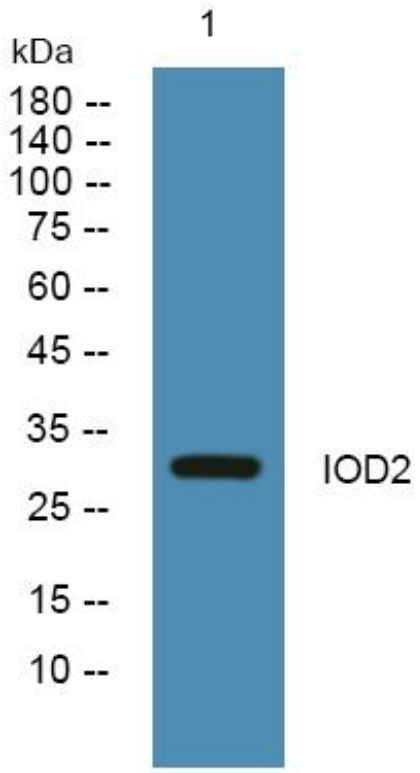
IOD2 Monoclonal Antibody

Catalog No	BYmab-07737
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	DIO2 ITDI2 TXDI2
Protein Name	Type II iodothyronine deiodinase (EC 1.97.1.10) (5DII) (DIOII) (Type 2 DI) (Type-II 5'-deiodinase)
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	IOD2 Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, 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 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	30kD
Cell Pathway	Membrane ; Single-pass membrane protein .
Tissue Specificity	Isoform 1 is expressed in the lung, trachea, kidney, heart, skeletal muscle, placenta, fetal brain and several regions of the adult brain (PubMed:8755651, PubMed:11165050). Isoform 2 is expressed in the brain, heart, kidney and trachea (PubMed:11165050).
Function	catalytic activity:3,5,3'-triiodo-L-thyronine + iodide + A + H(+) = L-thyroxine + AH(2).,function:Responsible for the deiodination of T4 (3,5,3',5'-tetraiodothyronine) into T3 (3,5,3'-triiodothyronine). Essential for providing the brain with appropriate levels of T3 during the critical period of development.,function:Responsible for the deiodination of T4 (3,5,3',5'-tetraiodothyronine).,similarity:Belongs to the iodothyronine deiodinase family.,tissue specificity:Heart, skeletal muscle, placenta, fetal brain and several regions of the adult brain.,

Background	deiodinase, iodothyronine type II(DIO2) Homo sapiens The protein encoded by this gene belongs to the iodothyronine deiodinase family. It catalyzes the conversion of prohormone thyroxine (3,5,3',5'-tetraiodothyronine, T4) to the bioactive thyroid hormone (3,5,3'-triiodothyronine, T3) by outer ring 5'-deiodination. This gene is widely expressed, including in thyroid, placenta, pituitary and brain. It is thought to be responsible for the 'local' production of T3, and thus important in influencing thyroid hormone action in these tissues. It has also been reported to be highly expressed in thyroids of patients with Graves disease, and in follicular adenomas. The intrathyroidal T4 to T3 conversion by this enzyme may contribute significantly to the relative increase in thyroidal T3 production in these patients. This protein is a selenoprotein containing the rare selenocysteine (Sec) amino acid at its active site, and may
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 IOD2 Monoclonal Antibody