

Rabbit DIO2 Polyclonal Antibody | anti-DIO2 antibody

DIO2 Antibody (Center)

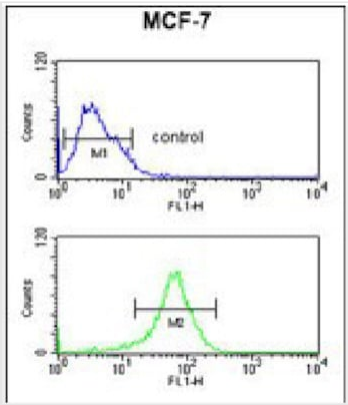
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA285208	Rabbit	Human (Predicted Reactivity: Pig)	Western Blot, Flow Cytometry, Functional Assay, Immunohistochemistry, ELISA

PRODUCT SYNONYMS

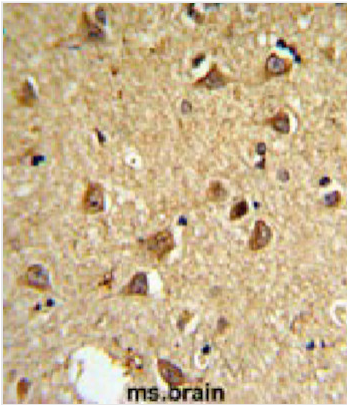
DIO2; Polyclonal Antibody; DIO2 Antibody (Center); Type II iodothyronine deiodinase; 5DII; DIOII; Type 2 DI; Type-II 5'-deiodinase; ITDI2; TXDI2; anti-DIO2 antibody

PRODUCT SPECIFICATIONS

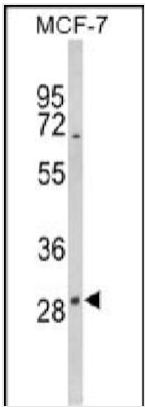
Host	Rabbit
Reactivity	Human (Predicted Reactivity: Pig)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	This DIO2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 165-191 amino acids from the Central region of human DIO2.
Purity/Purification	This antibody is purified through a protein A column, followed by peptide affinity purification.
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Sequence Positions	165-191
Sequence Length	309
Applicable Applications for anti-DIO2 antibody	WB (Western Blot), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), ELISA
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.
Cellular Location	Membrane; Single-pass membrane protein
Tissue Location	Isoform 1 is expressed in the lung, trachea, kidney, heart, skeletal muscle, placenta, fetal brain and several regions of the adult brain (PubMed:11165050, PubMed:8755651). Isoform 2 is expressed in the brain, heart, kidney and trachea (PubMed:11165050)
Preparation and Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.



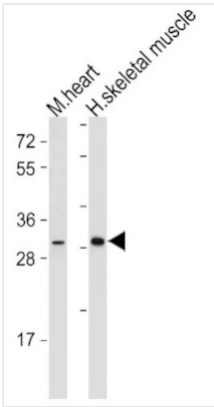
FCM/FACS (Flow Cytometry)
DIO2 Antibody (Center) flow cytometric analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



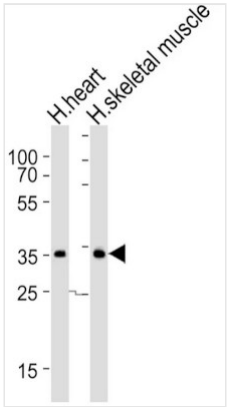
IHC (Immunohistochemistry)
DIO2 Antibody (Center) IHC analysis in formalin fixed and paraffin embedded mouse brain followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the mouse DIO2 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



WB (Western Blot)
Western blot analysis of DIO2 Antibody (Center) in MCF-7 cell line lysates (35ug/lane). DIO2 (arrow) was detected using the purified Pab.



WB (Western Blot)
All lanes : Anti-DIO2 Antibody (Center) at 1:500-2000 dilutionLane 1: Mouse heart tissue lysateLane 2: Human skeletal muscle tissue lysate Lysates/proteins at 20 ug per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution.Predicted band size : 31 kDa Blocking/Dilution buffer: 5% NFDm/TBST



WB (Western Blot)
Western blot analysis of lysates from human heart and human skeletal muscle tissue lysate (from left to right), using DIO2 Antibody (Center). AAA285208 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

ADDITIONAL INFORMATION

Related Product Information for anti-DIO2 antibody	DIO2 belongs to the iodothyronine deiodinase family. It activates thyroid hormone by converting the prohormone thyroxine (T4) by outer ring deiodination (ORD) to bioactive 3,3',5-triiodothyronine (T3).
Product Categories/Family for anti-DIO2 antibody	Crown Antibodies; Cancer; Metabolism; Neuroscience; Signal Transduction
References	He,B.,et.al., Prog. Neuropsychopharmacol. Biol. Psychiatry 33 (6), 986-990 (2009) Heemstra,K.A., et.al., J. Clin. Endocrinol. Metab. 94 (6), 2144-2150 (2009)

NCBI AND UNIPROT INFORMATION

NCBI GI #	7549805
NCBI GeneID	1734
NCBI Accession #	NP_000784.2; NP_001007024.1; NP_001229431.1; NP_001229432.1; NP_054644.1
NCBI GenBank Nucleotide #	NM_000793.5
UniProt Accession #	Q92813; Q6B0A3; Q9HCP8; Q9P1W4; Q9UDZ1; B9EGK0; G3V315
NCBI Official Full Name	type II iodothyronine deiodinase isoform a
NCBI Official Synonym Full Names	deiodinase, iodothyronine, type II
NCBI Official Symbol	DIO2
NCBI Official Synonym Symbols	D2; 5DII; SeIY; DIOII; TXDI2
NCBI Protein Information	type II iodothyronine deiodinase
UniProt Protein Name	Type II iodothyronine deiodinase
UniProt Gene Name	DIO2
UniProt Synonym Gene Names	ITDI2; TXDI2
UniProt Entry Name	IOD2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/dio2-antibody-western-blot-flow-cytometry-immunohistochemistry-elisa/285208>