



P95988Ra01
Deiodinase, Iodothyronine, Type I (DIO1)
Organism: Rattus norvegicus (Rat)
Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES

4th Edition (Revised in August, 2012)

[DESCRIPTION]

Protein Names: Deiodinase, Iodothyronine, Type I

Synonyms: DIO1, Itdi1

Species: Rat

Size: 100µg

Source: *Escherichia coli*-derived

Subcellular Location: Endoplasmic reticulum membrane; Single-pass membrane protein.

[PROPERTIES]

Residues: Thr31~Phe257 (Accession # P24389), with N-terminal His-Tag.

Grade & Purity: >95%, 27 kDa as determined by SDS-PAGE reducing conditions.

Formulation: Supplied as lyophilized form in PBS, pH 7.4, containing 0.01% Sarcosyl, 5% sucrose.

Endotoxin Level: <1.0 EU per 1µg (determined by the LAL method).

Applications: SDS-PAGE; WB; ELISA; IP.

(May be suitable for use in other assays to be determined by the end user.)

Predicted Molecular Mass: 27.80kDa

Predicted isoelectric point: 8.9

[PREPARATION]

Reconstitute in sterile PBS, pH7.2- pH7.4.



[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months .

Stability Test: The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCES]

The target protein is fused with N-terminal His-tag, its sequence is listed below.

MGHHHHHSG SEF-TLPERV KQNILAMGQK TGMTRNPRFA PDNVVPTFFS IQYFWFVLKV RWQRLEDRAE YGGLAPNCTV
VRLSGQKCNV WDFIQGSRPL VLNFGSCTUP SFLKFDQFK RLVDFASTA DFLIYIEEA HATDGWAFKN NVDIRQHRSL
QDRLRAAHL LARSPQCPVV VDTMQNQSSQ LYAALPERLY VIQEGRICYK GKPGPWNYNP EEVRVLEKL CIPPGHMPQF

[REFERENCES]

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2. The MGC Project Team. (2004) Genome Res. 14:2121-2127.
3. Berry M.J., (1992) J. Biol. Chem. 267:18055-18059.
4. Macejova D., *et al.* (2001) Gen. Physiol. Biophys. 20:293-302.

