

RPF989Ra01 10µg
Recombinant Deiodinase, Iodothyronine, Type III (DIO3)
Organism Species: Rattus norvegicus (Rat)
Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

10th Edition (Revised in Jan, 2014)

[**PROPERTIES**]

Residues: Arg11~Arg277

Tags: Two N-terminal Tags, His-tag and MBP-tag

Accession: P55073

Host: *E. coli*

Subcellular Location: Cell membrane; Single-pass type II membrane protein. Endosome membrane.

Purity: >95%

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

Formulation: Supplied as lyophilized form in 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% sarcosyl, 5% trehalose, and preservative.

Predicted isoelectric point: 6.1

Predicted Molecular Mass: 60.4kDa

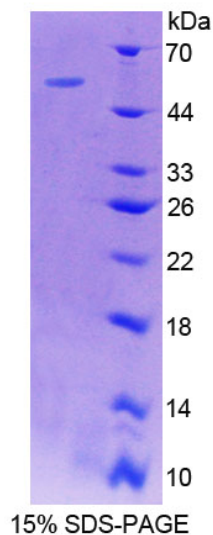
Accurate Molecular Mass: 55kDa as determined by SDS-PAGE reducing conditions.

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

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

Note: The possible reasons that the actual band size differs from the predicted are as follows:

1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
2. Relative charge: The composition of amino acids may affects the charge of the protein.
3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
5. Polymerization of the target protein: Dimerization, multimerization etc.



[USAGE]

Reconstitute in ddH₂O.

[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 sequence of the target protein is listed below.

RLCAQTA SCLVLFPRFL GTAFMLWLLD FLCIRKHFLR RRHPDHPEPE VELNSEGEEM
PPDDPPICVS DDNRLCTLAS LKAVWHGQKL DFFKQAHEGG PAPANSEVVRP DGFQSQRILD
YAQGTRPLVL NFGSCTUPPF MARMSAFQRL VTKYQRDVDF LIIYIEEAHP SDGWVTTDSP
YVIPQHRSLE DRVSAARVLQ QGAPGCALVL DTMANSSSSA YGAYFERLYV IQSGTIMYQG
GRGPDGYQVS ELRTWLERYD EQLHGTRPRR

[REFERENCES]

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2. Heilig R., *et al.* (2003) Nature 421:601-607.
3. The MGC Project Team. (2004) Genome Res. 14:2121-2127.
4. Kuiper G.G., *et al.* (2003) Endocrinology 144:2505-2513.