

RPC903Ra01 200µg
Recombinant Deiodinase, Iodothyronine, Type II (DIO2)
Organism Species: *Rattus norvegicus* (Rat)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression

Host: *E.coli*

Residues: Ser30~Phe259

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

Subcellular Location: Membrane

Purity: > 97%

Traits: Freeze-dried powder

Buffer formulation: PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.

Original Concentration: 200µg/mL

Applications: Positive Control; Immunogen; SDS-PAGE; WB.

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

Predicted isoelectric point: 5.8

Predicted Molecular Mass: 72.4kDa

Accurate Molecular Mass: 60kDa as determined by SDS-PAGE reducing conditions.

Phenomenon explanation:

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 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[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. 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. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

```

                                     S VILLKHVALL LSRKSTRGE
WRRMLTSEGL RCVWNSFLLD AYKQVKLGED APNSSVVHVS NPEAGNNCAS
EKTADGAECH LLDFAAERP LVVNFGSATU PPFTRQLPAF RQLVEEFSSV
ADFULLVYIDE AHPSDGWAVP GDSSMSFEVK KHRNQEDRCA AAHQLLERFS
LPPQCQVVAD RMDNNANVAY GVAFERVCIV QRRKIAYLGG KGPF SYNLQE
VRSWLEKNF
    
```

[IDENTIFICATION]

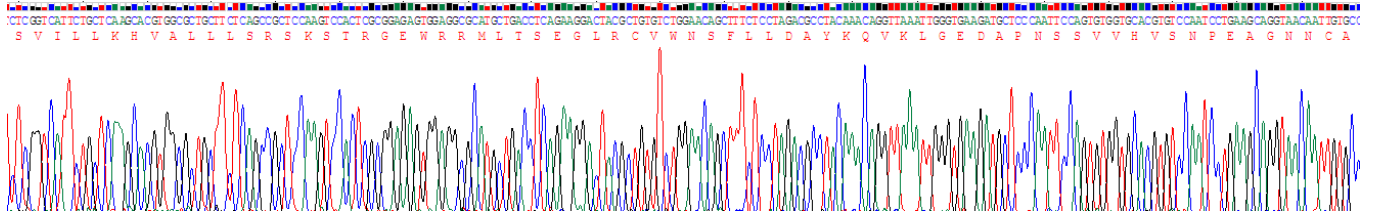


Figure. Gene Sequencing (Extract)

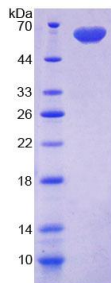


Figure. SDS-PAGE

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.