

RPA557Mu02 10ug

**Recombinant Thyroid Peroxidase (TPO)** 

Organism Species: Mus musculus (Mouse)

Instruction manual

FOR RESEARCH USE ONLY NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

12th Edition (Revised in Aug, 2016)



## [PROPERTIES]

Source: Prokaryotic expression

Host: E.coli

Residues: Arg636~Leu832

Tags: N-terminal His Tag

Subcellular Location: Secreted

**Purity:** > 95%

Traits: Freeze-dried powder

**Buffer formulation:** PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.

Original Concentration: 100µg/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: 5.2

Predicted Molecular Mass: 23.6kDa

**Accurate Molecular Mass:** 28kDa 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 ]

```
RTGPL FACIIGKQMK
ALRDGDRFWW ENTNVFTDAQ RQELEKHSLP RVICDNTGLT RVPVDAFRIG
KFPQDFESCE DIPSMDLELW RETFPQDDKC VFPEEVDNGN FVHCEESGKL
VLVYSCFHGY KLQGQEQVTC TQKGWDSEPP VCKDVNECAD LTHPPCHPSA
QCKNTKGSFQ CVCTDPYVLG EDEKTCIDSG RL
```

### [ IDENTIFICATION ]

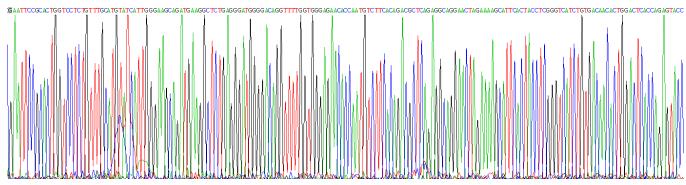


Figure . Gene Sequencing (extract)

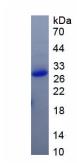


Figure. SDS-PAGE



# [ 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.