

## Product datasheet for RC222449L4V

## OriGene Technologies, Inc.

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## Thyroid Peroxidase (TPO) (NM 175719) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** Thyroid Peroxidase (TPO) (NM\_175719) Human Tagged ORF Clone Lentiviral Particle

Symbol: TPO

**Synonyms:** MSA; TDH2A; TPX

Mammalian Cell

Selection:

Puromycin

Vector:

pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_175719 **ORF Size:** 2628 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC222449).

Sequence:
OTI Disclaimer:

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**RefSeg:** NM 175719.3, NP 783650.1

 RefSeq Size:
 2981 bp

 RefSeq ORF:
 2631 bp

 Locus ID:
 7173

 UniProt ID:
 P07202

 Cytogenetics:
 2p25.3

**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Transmembrane





## Thyroid Peroxidase (TPO) (NM\_175719) Human Tagged ORF Clone Lentiviral Particle – RC222449L4V

**Protein Pathways:** Autoimmune thyroid disease, Cytokine-cytokine receptor interaction, Hematopoietic cell

lineage, Jak-STAT signaling pathway, Metabolic pathways, Tyrosine metabolism

**MW:** 96.7 kDa

**Gene Summary:** This gene encodes a membrane-bound glycoprotein. The encoded protein acts as an enzyme

and plays a central role in thyroid gland function. The protein functions in the iodination of tyrosine residues in thyroglobulin and phenoxy-ester formation between pairs of iodinated tyrosines to generate the thyroid hormones, thyroxine and triiodothyronine. Mutations in this gene are associated with several disorders of thyroid hormonogenesis, including congenital hypothyroidism, congenital goiter, and thyroid hormone organification defect IIA. Multiple transcript variants encoding distinct isoforms have been identified for this gene, but the full-length nature of some variants has not been determined. [provided by RefSeq, May 2011]