

## Product datasheet for **RC200849**

### THTPA (NM\_024328) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	THTPA (NM_024328) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	THTPA
Synonyms:	THTP; THTPASE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200849 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCCAGGGCTTGATTGAGGTGGAGCGAAAGTTCCTCCAGGGCCTGGCACAGAGGAGCGGCTGCAGG  
AGTTGGGGGGCACCCCTGGAGTACCGGGTCACCTCCGAGACACCTACTATGACACCCCTGAGCTGAGCCT  
CATGCAGGCTGACCACTGGCTGCGACGACGAGAGGATAGTGGATGGGAGCTCAAATGTCCTGGAGCAGCA  
GGTGTCTTAGGACCCACACGGAGTATAAGGAACTCACAGCGGAACCTACAATTGTGCCAACTCTGTA  
AGGTGCTCGGGGCTGACGGCCTGGGGGCTGGAGATGTGGCTGCTGTGCTGGGCCACTGGGGCTGCAGGA  
AGTAGCTAGTTTTGTGACTAAGCGGAGTGCCTGGAAGCTGGTGTCTTGGGAGCTGATGAAGAGGAGCCA  
CAGCTCAGGGTGGACTTGATACAGCCGACTTTGGCTACGCTGTGGGTGAGGTAGAGGCCCTGGTGCATG  
AGGAGGCTGAAGTACCAACTGCCCTAGAGAAGATCCACAGGCTCAGCAGCATGCTTGGTGTGCCTGCACA  
GGAGACAGCACCAGCCAAGCTGATTGTGTATCTACAGCGTTTCCGGCCTCAAGACTATCAGCGCCTGCTA  
GAAGTGAACAGCTCCAGAGAGAGGCCACAGGAGACTGAAGATCCTGACCACTGCCTGGGC

**ACGCGT**ACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC200849 protein sequence  
Red=Cloning site Green=Tags(s)

MAQGLIEVERKFLPGPGTEERLQELGGTLEYRVTFRDYYDTPELSLMQADHWLRRREDSGWELKCPGAA  
 GVLGPHTYEYKELTAEPTIVAQLCKVLRADGLGAGDVAAVLGPLGLQEVASFVTKRSAWKL VLLGADEEEP  
 QLRVDLDTADFGYAVGEVEALVHEEA EVPTALEKIHRLSSMLGVPAQETAPAKLIVYLRFRPQDYQRLL  
 EVNSSRERPQETEDPDHCLG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6394\\_a12.zip](https://cdn.origene.com/chromatograms/mk6394_a12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_024328

**ORF Size:** 690 bp

**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.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_024328.6](#)

**RefSeq Size:** 2228 bp

**RefSeq ORF:** 693 bp

**Locus ID:** 79178

**UniProt ID:** [Q9BU02](#)

**Cytogenetics:** 14q11.2

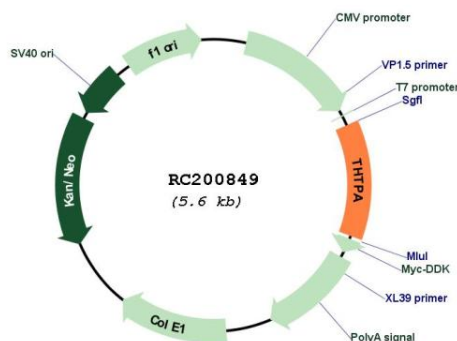
**Domains:** CYTH

**Protein Pathways:** Metabolic pathways, Thiamine metabolism

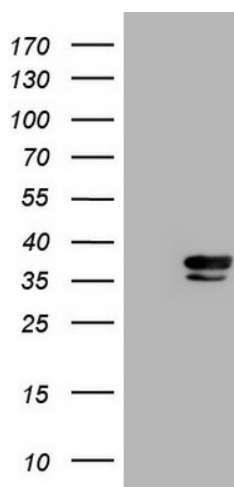
**MW:** 25.6 kDa

**Gene Summary:** This gene encodes an enzyme which catalyzes the biosynthesis of thiamine disphosphate (vitamin B1) by hydrolysis of thiamine triphosphate. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2011]

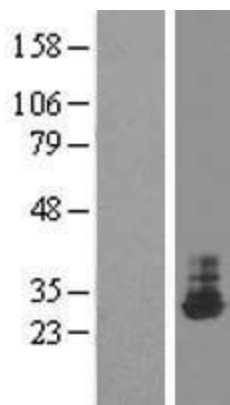
## Product images:



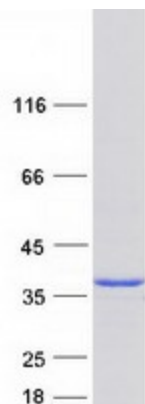
Circular map for RC200849



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY THTPA (Cat# RC200849, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-THTPA (Cat# [TA806046]). Positive lysates [LY411308] (100ug) and [LC411308] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY426679]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC225287] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified THTPA protein (Cat# [TP300849]). The protein was produced from HEK293T cells transfected with THTPA cDNA clone (Cat# RC200849) using MegaTran 2.0 (Cat# [TT210002]).