

## Product datasheet for **TP305868L**

### CASTOR1 (NM\_001037666) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins  
**Description:** Recombinant protein of human hypothetical protein LOC652968 (LOC652968), 1 mg  
**Species:** Human  
**Expression Host:** HEK293T  
**Expression cDNA Clone or AA Sequence:** >RC205868 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MELHILEHRVRVLSVARPGLWLYTHPLIKLLFLPRRSRCKFFSLTETPEDYTLMVDEEGFKELPPSEFLQ  
VAEATWLVLNVSSHSGAAVQAAGVTKIARSVIAPLAHHVSVLMLSTYQTDFILVREQDLSVVIHTLAQE  
FDIYREVGGEPVPVTRDDSSNGFPRTQHGPSPTVHPIQSPQNRFCVLTLDPETLPAIATTLIDVLFYSHS  
TPKEAASSPEPSSITFFAFSLIEGYISIVMDAETQKKFPSDLLLSSSGELWRMVRIGGQPLGFDECGI  
VAQIAGPLAAADISAYYISTFNFHDHALVPEDGIGSVIEVLQRRQEGLAS

**TR**TRPLE**QKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-Myc/DDK  
**Predicted MW:** 36.1 kDa  
**Concentration:** >0.05 µg/µL as determined by microplate BCA method  
**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining  
**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol  
**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.  
**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.  
**Storage:** Store at -80°C.  
**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.  
**RefSeq:** [NP\\_001032755](#)  
**Locus ID:** 652968



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UniProt ID: [Q8WTX7](#)

RefSeq Size: 1644

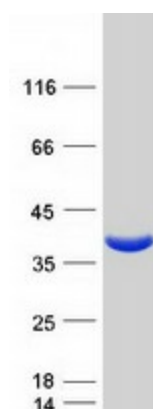
Cytogenetics: 22q12.2

RefSeq ORF: 987

Synonyms: GATSL3

**Summary:** Functions as an intracellular arginine sensor within the amino acid-sensing branch of the TORC1 signaling pathway. As a homodimer or a heterodimer with CASTOR2, binds and inhibits the GATOR subcomplex GATOR2 and thereby mTORC1. Binding of arginine to CASTOR1 allosterically disrupts the interaction of CASTOR1-containing dimers with GATOR2 which can in turn activate mTORC1 and the TORC1 signaling pathway.[UniProtKB/Swiss-Prot Function]

### Product images:



Coomassie blue staining of purified CASTOR1 protein (Cat# [TP305868]). The protein was produced from HEK293T cells transfected with CASTOR1 cDNA clone (Cat# [RC205868]) using MegaTran 2.0 (Cat# [TT210002]).