

## Product datasheet for **TP305868M**

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

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human hypothetical protein LOC652968 (LOC652968), 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC205868 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)
	MELHILEHRVRVLSVARPGLWLYTHPLIKLLFLPRRSRCKFFSLTETPEDYTLMVDEEGFKELPPSEFLQ VAEATWLVLNVSSHSGAAVQAAGVTKIARSVIAPLAHHVSVLMLSTYQTDFILVREQDLSVIHTLAQE FDIYREVGGEPVPVTRDDSSNGFPRTQHGPSPTVHPIQSPQNRFCVLTLDPETLPAIATTLIDVLFYSHS TPKEAASSPEPSSITFFAFSLIEGYISIVMDAETQKKFPSDLLLSSSGELWRMVRIGGQPLGFDECGI VAQIAGPLAAADISAYYISTFNFHDHALVPEDGIGSVIEVLQRRQEGLAS
	<b>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</b>
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:	<u><a href="#">NP_001032755</a></u>
Locus ID:	652968



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UniProt ID: [Q8WTX7](#)

RefSeq Size: 1644

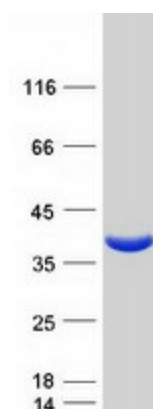
Cytogenetics: 22q12.2

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]).