

Product datasheet for PH320233

TIAM1 (NM_003253) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	TIAM1 MS Standard C13 and N15-labeled recombinant protein (NP_003244)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC220233
Predicted MW:	177.3 kDa
Protein Sequence:	>RC220233 representing NM_003253 Red=Cloning site Green=Tags(s)

MGNAESQHVEHEFYGEKHASLGRKHTSRSLRSLSHKTRRRRHASSGKVIHRNSEVSTRSSSTPSIPQSLAE
 NGLPEFSQDGTLEDFGSPDWDRVDMGLRPVSYTDSSVTPSVDSIVLTAASVQSMPTDEESRLYGDDAT
 YLAEGRRRQHSYTSNGPTFMETASFKKRKSADIWREDSLEFSLSDLQEHLSNEEILGSAEEKDCEE
 ARGMETRASPRQLSTCQRANSLGDLYAQKNSGVTANGGPGSKFAGYCRNLVSDIPNLANHKMPAAAAEET
 PPYSNYNTLPCRKSHCLSEGATNPQISHNSMQGRRRAKTTQDVNAGEGSEFADSGIEGATTDLLSRRS
 NATNSSYSPTTGRAVFGSDSGSSSTGDAARQGVYENFRRELEMSTTNSESL EEAGSAHSDEQSSGTLSSP
 GQSDILLTAAQGTVRKAGALAVKNFLVHKKNKVESATRRKWKHYVWSLKGCTLFFYESDGRSGIDHNSI
 PKHAVVWENSIVQAVPEHPKDFVFCLSNLGD AFLFQTTSQTELENWITAIHSACATAVARHHHKEDTL
 RLLKSEIKKLEQKIDMDEKMKMGEMQLSSVTDSKSKKTILDQIFVWEQNLEQFQMDLFRFCYLASLQG
 GELPNPKRLLAFASRP TKVAMGRLGIFSVSSFHALVAARTGETGVRRTQAMSRASAKRRSRFSSLWGLD
 TTSKSKQGRPSINQVFGEGTEAVKKSLEGIFDDIVPDGKREKEVVLPNVHQHNPDCDIWVHEYFTPSWFC
 LPNNQPALTVVRPGDTARDTLELICKTHQLDHSAYHLRLKFLIENKMQLYVPQPEEDIYELL YKEIEICP
 KVTQSIHIEKSDTAADTYGFLSSVEEDGIRRLYVNSVKETGLASKKGLKAGDEILEINNRAADALNSSM
 LKDFLSQPSLGLLVRTYPELEEGVELLESPPHRVDGPADL GESPLAFLTSNPGHSLCSEQGSSAETAPEE
 TEGPDLESSDETDHSSKSTEQVAFCRSLHEMNP SDQSPSPQDSTGPQLATMRQLSDADKLRKVICELLE
 TERTYVKDLNCLMERYLKPLQKETFLTQDEL DVLFGNLTEMVEFQVEFLKTL EDGVRVLPDLEKLEKVDQ
 FKKVFLSLGGSFLYYADRFKLYSAFCASHTKVPKVLVKAKTDTAFKAF LDAQNPQHSSTLESYLKPI
 QRILKYPLLLRELFALDAESEEHYHLDVAIKTMNKVASHINEMQKIHEEF GAVFDQLIAEQTGEKKEVA
 DLSMGDLLHTTVIWLNPPASLGKWKKEPELA AFVFKTAVVLVYKDGSKQK KLVGSHRSLIYEDWDPFR
 FRHMIPTEALQVRALASADA EANA VCEIVHVKSESEGRPERV FHLCCSSPESRKDFL KAVHSILRDKHRR
 QLLKTESLPSSQQYVFPFGKRLCALKGAR PAMSRV SAPSKSLGRRRRRLARNRFTIDSDAVSASSPEKE
 SQQPPGGGDTDRWVEEQFLAQYEEQDDIKETDILSDDDFCESVKGASVDRDLQERLQATSISQRERGR
 KTLDSHASMAQLKKQAALSGINGGLESASEEVIWVRREDFAPSRKLNTEI

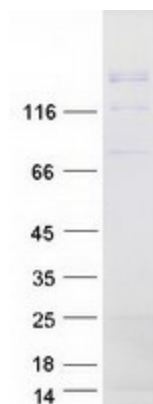
SGPTRRRLEQKLI SEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK



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Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_003244
RefSeq Size:	5521
RefSeq ORF:	4773
Synonyms:	TIAM-1
Locus ID:	7074
UniProt ID:	Q13009 , A0A2X0TW27
Cytogenetics:	21q22.11
Summary:	<p>This gene encodes a RAC1-specific guanine nucleotide exchange factor (GEF). GEFs mediate the exchange of guanosine diphosphate (GDP) for guanosine triphosphate (GTP). The binding of GTP induces a conformational change in RAC1 that allows downstream effectors to bind and transduce a signal. This gene thus regulates RAC1 signaling pathways that affect cell shape, migration, adhesion, growth, survival, and polarity, as well as influencing actin cytoskeletal formation, endocytosis, and membrane trafficking. This gene thus plays an important role in cell invasion, metastasis, and carcinogenesis. In addition to RAC1, the encoded protein activates additional Rho-like GTPases such as CDC42, RAC2, RAC3 and RHOA. This gene encodes multiple protein isoforms that experience a diverse array of intramolecular, protein-protein, and phosphorylation interactions as well as phosphoinositide binding. Both the longer and shorter isoforms have C-terminal Dbl homology (DH) and pleckstrin homology (PH) domains while only the longer isoforms of this gene have the N-terminal myristoylation site and the downstream N-terminal PH domain, ras-binding domain (RBD), and PSD-95/DlgA/ZO-1 (PDZ) domain. [provided by RefSeq, Jul 2017]</p>
Protein Families:	Druggable Genome
Protein Pathways:	Chemokine signaling pathway, Regulation of actin cytoskeleton

Product images:

Coomassie blue staining of purified TIAM1 protein (Cat# [TP320233]). The protein was produced from HEK293T cells transfected with TIAM1 cDNA clone (Cat# [RC220233]) using MegaTran 2.0 (Cat# [TT210002]).