

## Product datasheet for TP312105L

### TBC1D4 (NM\_014832) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins  
**Description:** Recombinant protein of human TBC1 domain family, member 4 (TBC1D4), 1 mg  
**Species:** Human  
**Expression Host:** HEK293T  
**Expression cDNA Clone or AA Sequence:** >RC212105 representing NM\_014832  
Red=Cloning site Green=Tags(s)

MEPPSICIQDEPFPHLEPEPGVSAQPGPGKPSDKRFRLWYVGGSCLDHRTTLPMLPWLMAEIRRRSQKPE  
 AGGCGAPAAREVILVLSAPFLRCVPAPGAGASGGTSPSATQPNPAVFIFEHKAQHISRFIHNSHDLTYFA  
 YLIKAQPDDPESQMACHVFRATDPSQVPDVISSIRQLSKAAMKEDAKPSKDNEAFYNSQKFVLYCGKV  
 TVTHKKAPSSLIDDCMEKFSLHEQQRLKIQGEQRGPDGDLADLEVWVPGSPGDCLPEEADGTDTHLGL  
 PAGASQPALTSRVCFPERILEDSEGFDEQQEFRSRCSVTGVQRRVHEGSQKSQPRRRHASAPSHVQPSD  
 SEKNRTMLFQVGRFEINLISPDTKSVLEKNFKDISSCSQGIKHVDHFGFICRESPEPGLSQYICYVFQC  
 ASESLVDEVMLTLKQAFSTAAALQSAKTQIKLCEACPMHSLHKLKERIEGLYPPRAKLVQRHLSLTDN  
 EQADIFERVQMKPVSDQEENELVILHLRQLCEAKQKTHVHIGEGPSTISNSTIPENATSSGRFKLDILK  
 NKAKRSLTSSLENIFSRGANRMRGRLGVSDFSERSNSLASEKDYSPPGDSPPGTPPASPPSSAWQTFPEED  
 SDSPQFRRAHTFSHPPSSTKRKLNLDGRAQGVRSPLLRQSSSEQCSNLSSVRRMYKESNSSSSLP  
 TSFAPSFTAPSFQKSFYQNSGRLSPQYENEIRQDTASESSDGEGRKRTSSTCSNESLSVGGTSVTPRRI  
 SWRQRIFLRVASPMNKSPSAMQQQDGLDRNELLSLPLSPTMEEELVWFLSGEDDPEKIEERKSKELR  
 SLWRKAIHQIILLRMEKENQKLEGASRDELQSRKVKLDYEEVGACQKEVLITWDKLLNCRAKIRCDME  
 DIHTLLKEGVPKSRRGEIWQFLALQYRLRHRLPNKQPPDISYKELLQLTAQQHAILVDLGRTPHPY  
 FSVQLGPGQLSLFNLLKAYSLLDKEVGYCQGIFVAGVLLHLMSEEAFEMLKFLMYDLGFRKQYRPDM  
 SLQIQMYQLSRLLDYHRDLYNHLEENEISPSLYAAPWFLTFASQFSLGFVARVDFIIFLQGTVEVIFKV  
 ALSLLSSQETLIMECESFENIVEFLKNTLPDMNTSEMEKITQVFEMDISKQLHAYEVEYHVLQDELQES  
 SYSCEDSETLEKLERANSQKQRQNMDDLEKLQVAHTKIQALESNLENLLTRETMMKSLIRTLEQEKMAYQ  
 KTVEQLRKLIPADALVNCDDLLRDLNCPNPKAKIGNKP

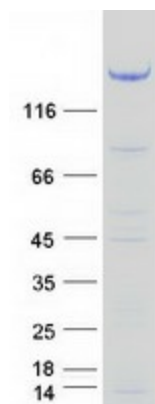
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Tag:** C-Myc/DDK  
**Predicted MW:** 146.4 kDa  
**Concentration:** >0.05 µg/µL as determined by microplate BCA method



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<b>Purity:</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_055647</a>
<b>Locus ID:</b>	9882
<b>UniProt ID:</b>	<a href="#">O60343</a>
<b>RefSeq Size:</b>	5922
<b>Cytogenetics:</b>	13q22.2
<b>RefSeq ORF:</b>	3897
<b>Synonyms:</b>	AS160; NIDDM5
<b>Summary:</b>	<p>This gene is a member of the Tre-2/BUB2/CDC16 domain family. The protein encoded by this gene is a Rab-GTPase-activating protein, and contains two phosphotyrosine-binding domains (PTB1 and PTB2), a calmodulin-binding domain (CBD), a Rab-GTPase domain, and multiple AKT phosphomotifs. This protein is thought to play an important role in glucose homeostasis by regulating the insulin-dependent trafficking of the glucose transporter 4 (GLUT4), important for removing glucose from the bloodstream into skeletal muscle and fat tissues. Reduced expression of this gene results in an increase in GLUT4 levels at the plasma membrane, suggesting that this protein is important in intracellular retention of GLUT4 under basal conditions. When exposed to insulin, this protein is phosphorylated, dissociates from GLUT4 vesicles, resulting in increased GLUT4 at the cell surface, and enhanced glucose transport. Phosphorylation of this protein by AKT is required for proper translocation of GLUT4 to the cell surface. Individuals homozygous for a mutation in this gene are at higher risk for type 2 diabetes and have higher levels of circulating glucose and insulin levels after glucose ingestion. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Aug 2015]</p>

**Product images:**

Coomassie blue staining of purified TBC1D4 protein (Cat# [TP312105]). The protein was produced from HEK293T cells transfected with TBC1D4 cDNA clone (Cat# [RC212105]) using MegaTran 2.0 (Cat# [TT210002]).