

## Product datasheet for **TP310866M**

### SMURF 2 (SMURF2) (NM\_022739) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human SMAD specific E3 ubiquitin protein ligase 2 (SMURF2), 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC210866 protein sequence Red=Cloning site Green=Tags(s)

MSNPGGRRNGPVKLRLTVLCAKNLVKKDFFRLPDPFAKVVDGSGQCHSTDTVKNTLDPKWNQHYDLYIG  
KDSVTISVWNHKKIHKKQGAGFLGCVRLLSNAINRLKDTGYQRLDLCKLGPNDNDTVRGQIVVSLQSRD  
RIGTGGQVVDCSRLEDNDLPDGWEERTASGRIQYLNHITRTTQWERPTRPASEYSSPGRPLSCFVDENT  
PISGTNGATCGQSSDPRLAERRVRSQRHRNYMSRTHLHTPPDLPEGYEQRTTQQGQVYFLHTQTGVSTWH  
DPRVPRDLSNINCEELGPLPPGWEIRNTATGRVYFVDHNNRTTQFTDPRLSANLHLVLRQNQLKDQQQQ  
QVVS LCPDDTECLTVPRYKRD LVQKLKILRQELSQQPQAGHCRIEVSREEIFEESYRQVMKMRPKDLWK  
RLMIKFRGEEGLDYGGVAREWLYLLSHEMLNPPYGLFQYSRDDIYTLQINPDSAVNPEHLSYFHFVGRIM  
GMAVFHGHYIDGGFTLPFYKQLLGKSITLDDMELVDPDLHNSLVWILENDITGVL DHTFCVEHNAYGEII  
QHELKPNGKSIPVNEENKKEYVRLYVNWFRFLRGIEAQFLALQKGFNEVIPQHLLKTFDEKELELIICGLG  
KIDVNDWKVNTRLKHCTPDSNIVKWFVKAVEFFDEERRARLLQFVTGSSRVPLQGFKALQGAAGPRLFTI  
HQIDACTNNLPKAHTCFNRIDIPPYESYEKLYEKLLTAIEETCGFAVE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

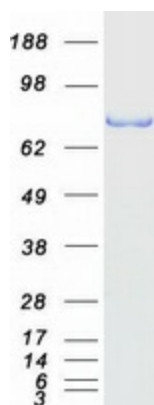
Tag:	C-Myc/DDK
Predicted MW:	86 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity 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.



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<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_073576</a>
<b>Locus ID:</b>	64750
<b>UniProt ID:</b>	<a href="#">Q9HAU4</a> , <a href="#">Q96DE7</a>
<b>RefSeq Size:</b>	3866
<b>Cytogenetics:</b>	17q23.3-q24.1
<b>RefSeq ORF:</b>	2244
<b>Summary:</b>	E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. Interacts with SMAD1 and SMAD7 in order to trigger their ubiquitination and proteasome-dependent degradation. In addition, interaction with SMAD7 activates autocatalytic degradation, which is prevented by interaction with SCYE1. Forms a stable complex with the TGF-beta receptor-mediated phosphorylated SMAD2 and SMAD3. In this way, SMAD2 may recruit substrates, such as SNON, for ubiquitin-mediated degradation. Enhances the inhibitory activity of SMAD7 and reduces the transcriptional activity of SMAD2. Coexpression of SMURF2 with SMAD1 results in considerable decrease in steady-state level of SMAD1 protein and a smaller decrease of SMAD2 level.[UniProtKB/Swiss-Prot Function]
<b>Protein Families:</b>	Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors
<b>Protein Pathways:</b>	Allograft rejection, Antigen processing and presentation, Autoimmune thyroid disease, Cell adhesion molecules (CAMs), Endocytosis, Graft-versus-host disease, TGF-beta signaling pathway, Type I diabetes mellitus, Ubiquitin mediated proteolysis, Viral myocarditis

### Product images:



Coomassie blue staining of purified SMURF2 protein (Cat# [TP310866]). The protein was produced from HEK293T cells transfected with SMURF2 cDNA clone (Cat# [RC210866]) using MegaTran 2.0 (Cat# [TT210002]).