

Product datasheet for PH310866

SMURF 2 (SMURF2) (NM_022739) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	SMURF2 MS Standard C13 and N15-labeled recombinant protein (NP_073576)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC210866
Predicted MW:	86.2 kDa
Protein Sequence:	>RC210866 protein sequence Red=Cloning site Green=Tags(s)

MSNPGRRNGPVKLRLTVLCAKNLVKKDFRLLPDFAKVVVDGSGQCHSTDTVKNTLDPKWNQHYDLYIG
KSDSVTISVWNHKKIHKKQGAGFLGCVRLLSNAINRLKDTGYQRLDLCKLGPNDNDTVRGQIVVSLQSRD
RIGTGGQVVDCSRLFDNDLPDGWEERRTASGRIQYLNHITRRTQWERPTRPASEYSSPGRPLSCFV DENT
PISGTNGATCGQSSDPRLAERRVRSQRHRNYSRTHLHTPPDLPEGYEQRRTTQQGQVYFLHTQTGVSTWH
DPRVPRDLSNINCEELGPLPPGWEIRNTATGRVYFVDHNNRTTQFTDPRLSANLHLVLRQNQLKDQQQQ
QVVSLCPDDECLTVPRYKRDLVQKLIKLRQELSQQQPQAGHCRIEVSREEIFEESYRQVMKMRPKDLWK
RLMIKFRGEEGLDYGGVAREWL YLLSHEMLNPYYGLFQYSRDDIYTLQINPDSAVNPEHLSYFHFVGRIM
GMAVFHGHYIDGGFTLPFYKQLLGSITLDDMELVDPDLHNSLVWILENDITGVL DHTFCVEHNAYGEII
QHELKPNKGSIPVNEENKKEYVRLYVNWRFRLGIEAQFLALQKGFNEVIPQHLLKTFDEKELELIICGLG
KIDVNDWKVNTRLKHCTPDSNIVKWFKAVEFFDEERRARLLQFVTGSSRVPLQGFKALQGAAGPRLFTI
HQIDACTNLPKAHTCFNRIDIPPYESYEKLYEKLLTAIEETCGFAVE

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
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- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-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:	<u>NP_073576</u>



[View online »](#)

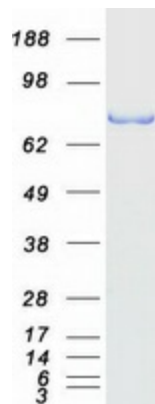
RefSeq Size: 3866
RefSeq ORF: 2244
Locus ID: 64750
UniProt ID: [Q9HAU4](#), [Q96DE7](#)
Cytogenetics: 17q23.3-q24.1

Summary: 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]

Protein Families: Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors

Protein Pathways: 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]).