

SMURF2 Protein, Human, Recombinant (His)

General Information

Synonyms:	hSMURF2;E3 ubiquitin-protein ligase SMURF2;SMAD ubiquitination regulatory factor 2;SMAD-specific E3 ubiquitin-protein ligase 2;HECT-type E3 ubiquitin transferase SMURF2;SMURF2
Protein Construction:	1-748 aa
Species:	Human
Expression Host:	E. coli
Accession:	Q9HAU4
Molecular Weight:	90.3 kDa (predicted)
AA Sequence:	MSNPGRRNGPVKLRRLTVLCAKNLVKKDFRLLPDPFAKVVVDGSGQCHSTDTVKNTLDPKWNQHYDLYIGK SDSVTISVWNHKKIHKKQGAGFLGCVRLLSNAINRLKDTGYQRDLCKLGPNDNDTVRGQIVVSLQSRDRIGT GGQVVDCSRFDNDLPDGWEERRTASGRIQYLNHITRTTQWERPTRPASEYSSPGRPLSCFVDENTPISGTNG ATCGQSSDPRLAERRVRSQRHRNYMSRTHLHTPPDLPEGYEQRRTQQGQVYFLHTQTGVSTWHDPVPRDL SNINCEELGPLPPGWEIRNTATGRVYFVDHNNRTTQFTDPRLSANLHLVLRQNQLKDQQQQVVSCLPDD TECLTVPRYKRDLVQKLKILRQELSQQPQAGHCRIEVSREEIFEESYRQVMKMRPKDLWKRLMIKFRGEEGL DYGGVAREWLYLLSHEMLNPYYGLFQYSRDDIYTLQINPDSAVNPEHLSYFHFVGRIMGMAVFGHYIDGGF TLPFYKQLLGKSITLDDMELVDPDLHNSLVWILENDITGVLDTFCVEHNAYGEIIQHELKPNGKSIPVNEENKK EYVRLYVNRWFLRGIEAQFLALQKGFNEVIPQHLLKTFDEKELELIICGLGKIDVNDWKNVTRKHKCTPDSNIVK WFWKAVEFFDEERRARLLQFVTGSSRVPLQGFKALQGAAGPRLFTIHQIDACTNNLPAHTCFNRIDIPPYES YEKLYEKLLTAIEETCGFAVE

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 85% as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Tris-based buffer, 50% glycerol

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the CoA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

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 SMAD7 to trigger SMAD7-mediated transforming growth factor beta/TGF-beta receptor ubiquitin-dependent degradation, thereby downregulating TGF-beta signaling. In addition, interaction with SMAD7 activates autocatalytic degradation, which is prevented by interaction with AIMP1. Also forms a stable complex with TGF-beta receptor-mediated phosphorylated SMAD1, SMAD2 and SMAD3, and targets SMAD1 and SMAD2 for ubiquitination and proteasome-mediated degradation. SMAD2 may recruit substrates, such as SNON, for ubiquitin-dependent degradation. Negatively regulates TGFB1-induced epithelial-mesenchymal transition and myofibroblast differentiation.; (Microbial infection) In case of filoviruses Ebola/EBOV and Marburg/MARV infection, the complex formed by viral matrix protein VP40 and SMURF2 facilitates virus budding.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481