Datasheet for ABIN7555579

# SMURF2 Protein (AA 1-748) (His tag)

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## Overview

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| Quantity: | 1 mg |
| Target: | SMURF2 |
| Protein Characteristics: | AA 1-748 |
| Origin: | Human |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This SMURF2 protein is labelled with His tag. |
| Application: | SDS-PAGE (SDS), Western Blotting (WB) |

## Product Details

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| Purpose: | Custom-made recombinat SMURF2 Protein expressed in mammalien cells. |
| Sequence: | MSNPGGRRNG PVKLRLTVLC AKNLVKKDFF RLPDPFAKVV VDGSGQCHST DTVKNTLDPK WNQHYDLYIG KSDSVTISVW NHKKIHKKQG AGFLGCVRLL SNAINRLKDT GYQRLDLCKL GPNDNDTVRG QIVVSLQSRD RIGTGGQVVD CSRLFDNDLP DGWEERRTAS GRIQYLNHIT RTTQWERPTR PASEYSSPGR PLSCFVDENT PISGTNGATC GQSSDPRLAE RRVRSQRHRN YMSRTHLHTP PDLPEGYEQR TTQQGQVYFL HTQTGVSTWH DPRVPRDLSN INCEELGPLP PGWEIRNTAT GRVYFVDHNN RTTQFTDPRL SANLHLVLNR QNQLKDQQQQ QVVSLCPDDT ECLTVPRYKR DLVQKLKILR QELSQQQPQA GHCRIEVSRE EIFEESYRQV MKMRPKDLWK RLMIKFRGEE GLDYGGVARE WLYLLSHEML NPYYGLFQYS RDDIYTLQIN PDSAVNPEHL SYFHFVGRIM GMAVFHGHYI DGGFTLPFYK QLLGKSITLD DMELVDPDLH NSLVWILEND ITGVLDHTFC VEHNAYGEII QHELKPNGKS IPVNEENKKE YVRLYVNWRF LRGIEAQFLA LQKGFNEVIP QHLLKTFDEK ELELIICGLG KIDVNDWKVN TRLKHCTPDS NIVKWFWKAV |

## Product Details

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| | EFFDEERRAR LLQFVTGSSR VPLQGFKALQ GAAGPRLFTI HQIDACTNNL PKAHTCFNRI DIPPYESYEK LYEKLLTAIE ETCGFAVE **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.** |
| Characteristics: | Key Benefits:<br>• Made to order protein - from design to production - by highly experienced protein experts.<br>• Protein expressed in mammalien cells and purified in one-step affinity chromatography<br>• The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.<br>• State-of-the-art algorithm used for plasmid design (Gene synthesis).<br><br>This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.<br><br>If you are not interested in a full length protein, please contact us for individual protein fragments.<br><br>The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified. |
| Purity: | > 90 % as determined by Bis-Tris Page, Western Blot |
| Grade: | custom-made |

## Target Details

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| Target: | SMURF2 |
| Alternative Name: | SMURF2 (SMURF2 Products) |
| Background: | E3 ubiquitin-protein ligase SMURF2 (hSMURF2) (EC 2.3.2.26) (HECT-type E3 ubiquitin transferase SMURF2) (SMAD ubiquitination regulatory factor 2) (SMAD-specific E3 ubiquitin-protein ligase 2),FUNCTION: 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 (PubMed:11016919). Interacts with SMAD7 to trigger SMAD7-mediated transforming growth factor beta/TGF-beta receptor ubiquitin-dependent degradation, thereby down-regulating TGF-beta signaling (PubMed:11163210, PubMed:12717440, PubMed:21791611). In addition, interaction with SMAD7 activates autocatalytic degradation, which is prevented by interaction with AIMP1 (PubMed:18448069). Also forms a stable |

## Target Details

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| | complex with TGF-beta receptor-mediated phosphorylated SMAD1, SMAD2 and SMAD3, and targets SMAD1 and SMAD2 for ubiquitination and proteasome-mediated degradation (PubMed:11016919, PubMed:11158580, PubMed:11389444). SMAD2 may recruit substrates, such as SNON, for ubiquitin-dependent degradation (PubMed:11389444). Negatively regulates TGFB1-induced epithelial-mesenchymal transition and myofibroblast differentiation (PubMed:30696809). {ECO:0000269\|PubMed:11016919, ECO:0000269\|PubMed:11158580, ECO:0000269\|PubMed:11163210, ECO:0000269\|PubMed:11389444, ECO:0000269\|PubMed:12717440, ECO:0000269\|PubMed:18448069, ECO:0000269\|PubMed:21791611, ECO:0000269\|PubMed:30696809}., FUNCTION: (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. {ECO:0000269\|PubMed:33673144}. |
| Molecular Weight: | 86.2 kDa |
| UniProt: | Q9HAU4 |

## Application Details

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| Application Notes: | In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though. |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |
| Buffer: | The buffer composition is at the discretion of the manufacturer. |
| Handling Advice: | Avoid repeated freeze-thaw cycles. |
| Storage: | -80 °C |
| Storage Comment: | Store at -80°C. |
| Expiry Date: | 12 months |