Datasheet for ABIN7553719

# APPL1 Protein (AA 1-709) (His tag)

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## Overview

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| Quantity: | 1 mg |
| Target: | APPL1 |
| Protein Characteristics: | AA 1-709 |
| Origin: | Human |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This APPL1 protein is labelled with His tag. |

## Product Details

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| Purpose: | Custom-made recombinant APPL1 Protein expressed in mammalian cells. |
| Sequence: | MPGIDKLPIE ETLEDSPQTR SLLGVFEEDA TAISNYMNQL YQAMHRIYDA QNELSAATHL TSKLLKEYEK QRFPLGGDDE VMSSTLQQFS KVIDELSSCH AVLSTQLADA MMFPITQFKE RDLKEILTLK EVFQIASNDH DAAINRYSRL SKKRENDKVK YEVTEDVYTS RKKQHQTMMH YFCALNTLQY KKKIALLEPL LGYMQAQISF FKMGSENLNE QLEEFLANIG TSVQNVRREM DSDIETMQQT IEDLEVASDP LYVPDPDPTK FPVNRNLTRK AGYLNARNKT GLVSSTWDRQ FYFTQGGNLM SQARGDVAGG LAMDIDNCSV MAVDCEDRRY CFQITSFDGK KSSILQAESK KDHEEWICTI NNISKQIYLS ENPEETAARV NQSALEAVTP SPSFQQRHES LRPAAGQSRP PTARTSSSGS LGSESTNLAA LSLDSLVAPD TPIQFDIISP VCEDQPGQAK AFGQGGRRTN PFGESGGSTK SETEDSILHQ LFIVRFLGSM EVKSDDHPDV VYETMRQILA ARAIHNIFRM TESHLLVTCD CLKLIDPQTQ VTRLTFPLPC VVLYATHQEN KRLFGFVLRT SSGRSESNLS SVCYIFESNN EGEKICDSVG LAKQIALHAE LDRRASEKQK EIERVKEKQQ KELNKQKQIE KDLEEQSRLI AASSRPNQAS SEGQFVVLSS SQSEESDLGE GGKKRESEA **Sequence without tag.** |

## Product Details

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| | **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.** |
| Specificity: | If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer. |
| Characteristics: | Key Benefits:<br>• Made to order protein - from design to production - by highly experienced protein experts.<br>• Protein expressed in mammalian 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, anti-tag ELISA, Western Blot and analytical SEC (HPLC) |
| Grade: | custom-made |

## Target Details

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| Target: | APPL1 |
| Alternative Name: | APPL1 (APPL1 Products) |
| Background: | DCC-interacting protein 13-alpha (Dip13-alpha) (Adapter protein containing PH domain, PTB domain and leucine zipper motif 1),FUNCTION: Multifunctional adapter protein that binds to various membrane receptors, nuclear factors and signaling proteins to regulate many processes, such as cell proliferation, immune response, endosomal trafficking and cell metabolism (PubMed:26583432, PubMed:15016378, PubMed:26073777, PubMed:19661063, PubMed:10490823). Regulates signaling pathway leading to cell proliferation through interaction with RAB5A and subunits of the NuRD/MeCP1 complex (PubMed:15016378). Functions as a positive regulator of innate immune response via activation of AKT1 signaling |

## Target Details

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| | pathway by forming a complex with APPL1 and PIK3R1 (By similarity). Inhibits Fc-gamma receptor-mediated phagocytosis through PI3K/Akt signaling in macrophages (By similarity). Regulates TLR4 signaling in activated macrophages (By similarity). Involved in trafficking of the TGFBR1 from the endosomes to the nucleus via microtubules in a TRAF6-dependent manner (PubMed:26583432). Plays a role in cell metabolism by regulating adiponecting and insulin signaling pathways (PubMed:26073777, PubMed:19661063, PubMed:24879834). Required for fibroblast migration through HGF cell signaling (By similarity). Positive regulator of beta-catenin/TCF-dependent transcription through direct interaction with RUVBL2/reptin resulting in the relief of RUVBL2-mediated repression of beta-catenin/TCF target genes by modulating the interactions within the beta-catenin-reptin-HDAC complex (PubMed:19433865). {ECO:0000250\|UniProtKB:Q8K3H0, ECO:0000269\|PubMed:10490823, ECO:0000269\|PubMed:15016378, ECO:0000269\|PubMed:19433865, ECO:0000269\|PubMed:19661063, ECO:0000269\|PubMed:24879834, ECO:0000269\|PubMed:26073777, ECO:0000269\|PubMed:26583432}. |
| Molecular Weight: | 79.7 kDa |
| UniProt: | Q9UKG1 |

## Application Details

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| Application Notes: | We expect the protein to work for functional studies. 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 |