

Product datasheet for TP318435L

Huntingtin (HTT) (NM_002111) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins
Description: Purified recombinant protein of Human huntingtin (HTT), with C-terminal MYC/DDK tag, expressed in HEK293 cells, 1 mg
Species: Human
Expression Host: HEK293
Expression cDNA Clone or AA Sequence: >RC218435 representing NM_002111
Red=Cloning site Green=Tags(s)

MATLEKLMKAFESLKSFFQQQQQQQQQQQQQQQQQQQQQQQQQQPPPPPPPPPPPPQLPQPPPQAQPLLQPQP
 PPPPPPPGPAVAEEPLHRPKKELSATKKDRVNHCLTICENIVAQSVRNSPEFQKLLGIAMELFLLCSD
 AESDVRMVADECLNKVIKALMDSNLPRLQLELYKEIKKNGAPRSLRAALWRFAELAHVLRPQKCRPYLVN
 LLPCLTRTSKRPEESVQETLAAAVPKIMASFGNFANDNEIKVLLKAFIANLKSSSPTIRRTAAGSAVSIC
 QHSRRTQYFYSWLLNVLLGLLVPVEDEHSTLLILGVLLTLRYLVPLLQQQVKDTSKGSFGVTRKEMEVS
 PSAEQLVQVYELTLHHTQHGDHNVTGALELLQQLFRTPPELLQTLTAVGGIGQLTAAKEESGGRSRSG
 SIVELIAGGGSSCSPVLSRKQKGVLLGEEEALEDDSESRSVDVSSALTASVKDEISGELAASSGVSTPG
 SAGHDIITEQPRSQHTLQADSVDLASCDLTSSATDGDDEEDILSHSSQVSAVPSDPAMDLDNDGTQASSPI
 SDSSQTTEGPDSAVTPSDSSEIVLDGTDNQYLGLQIGQPQDEDEEATGILPDEASEAFRNSMALQQA
 LLKNMSHCRQPSDSSVDKFLRDEATEPGDQENKPCRIGKDIGQSTDDDSAPLVHCVRLLSASFLLTGGK
 NVLVPDRDVRVSVKALALSCVGAVALHPESFFSKLYKVPDLTTEYPEEQYVSDILNYIDHGDQPVRGAT
 AILCGTLICILSRSRFHVGDWMTIRTGTGNTFSLADCIPLLRKTLKDESSVTCKLACTAVRNCVMSLC
 SSSYSELGLLIIDVLTNRNSSYWLVRTELLETLAEIDFRLVSFLEAKAENLHRGAHHYTGLLKLQERVL
 NNVIHLLGDEDPRVRHVAASLIRLVPKLFYKCDQGQADPVAVARDQSSVYLKLLMHETQPPSHFSVS
 TITRIYRGYNLLPSITDVTMENNLSRVIAAVSHELITSTTRALTFGCCEALCLLSTAFPVCIWSLGHWC
 VPPLSASDESRSCTVGMATMILTLLSSAWFPLDLSAHQDALILAGNLLAASAPKSLRSSWASEEEANPA
 ATKQEEVWPALGDRALVPMVEQLFSLHLLKVINICAHVLDVAPGPAIKAALPSLTNPPSLSPIRRKQKEK
 EPGEQASVPLSPKKGSEASAASRQSDTSGPVTTSSSSLSGFYHLPYKLVKLDVLDKATHANYKVTLDLQ
 STEKFGFLRSALDVLSQLILELATLQDIGKCVVEILGYLKSFCFSREPMMATVCVQQLLKTFLGTNLASQF
 DGLSSNPSKSGRAQRLGSSSVRPGLYHYCFMAYPTHFTQALADASLRNMVQAEQENDTSGWFDVLQKVS
 TQLKTNLTSVTKNRADKNAIHNHIRLFEPLVIKALKQYTTTTCVQLQKQVLDLLAQLVQLRVNYCLLDSD
 QVFIGFVLKQFEYIEVGQFRESEAIIPNIFFLVLLSYERYHSKQIIGIPKIIQLCDGIMASGRKAVTHA
 IPALQPIVHDLFVLRGTNKADAGKELETQKEVVSMMLRLIQYHQVLEMFILVLQQCHKENEDKWKRLSR
 QIADIILPMLAKQMMHIDSHEALGVLNLTLEILAPSSLRPVDMLLRSMFVTPNTMASVSTVQLWISGILA
 ILRVLISQSTEDIVLSRIQELSFSPYLISCTVINRLRDGDSTSTLEEHSSEKQIKNLPEETFSRFLQLV



GILLEDIVTKQLKVMSEQQHTFYCQELGTLMLCLIHIFKSGMFRRITAAATRLFRSDGCGGSFYTLDSL
 NLRARSMITTHPALVLLWCQILLVNHTDYRWWAEVQQTPKRHSLSSTKLLSPQMSGEEEDSDLAALGM
 CNREIVRRGALILFCDYVCQNLHDSEHLTWLVNHIQDLISLSHEPPVQDFISAVHRNSAASGLFIQAIQ
 SRCENLSTPTMLKKTLCQLEGIHLSQSGAVLTLYVDRLLCTPFRVLARMVDILACRRVEMLLAANLQSSM
 AQLPMEELNRIQEYLQSSGLAQRHQRLYSLLDRFRLSTMQDSLSPSPVSSHPLDGDGHVSLETVSPDKD
 WYVHLVKSQCWTRSDSALLEGAELVNRIPAEDMNAFMNNEFNLSLLAPCLSLGMSEISGGQKSALFEAA
 REVTLARVSGTVQQLPAVHHVFQPELPAEPAAYWSKLNDFGDAALYQSLPTLARALAQYLWVSKLPSH
 LHLPEKEKDIVKFVATLEALSWHLIHEQIPLSLDLQAGLDCCCLALQLPGLWSVVSSTEFVTHACSLI
 YCVHFILEAVAVQPGEQLLSPERRTNTPKAISEEEEEVDPNTQNPKYITAAACEMVAEMVESLQSVLALGH
 KRNSGVP AFLTPLLNRNIISLARLPLVNSYTRVPLVWKLGWSPKPGDFGTAFPEIPVEFLQEKEVFKE
 FIYRINTLGWTSRTQFEETWATLLGVLVTQPLVMEQEESPEEDTERTQINVLAVQAITSVLVSAMTVPV
 AGNPAVSCLEQQPRNKPLKALDTRFGRKLSIIRGIVEQEIQAMVSKRENIATHHLYQAWDPVPSLSPATT
 GALISHEKLLLQINPERELGMSYKLGQVSIHSVWLGNSITPLREEEWDEEEEEADAPAPSSPPTSPVN
 SRKHRAGVDIHSQSFLELYSRWILPSSSARRTPAILISEVVRSLVSDLFTERNQFELMYVTLELR
 RVHPSEDEILAQYLPATCKAAAVLGMDKAVAEPVSRLLLESTLRSSHLP SRV GALHGVLYVLECDLLDDT
 AKQLIPVISDYLLSNLKGIAHCVNIHSQQHVLVMCATAFYLIENYPLDVGPEFSASIIQMCVMLSGSEE
 STPSIIYHCALRGLERLLLSEQLSRLDAESLVKLSVDRVNVHSPHRAMAALGLMLTTCMYTGKEKVSPGRT
 SDPNPAAPDSESIVAMERVSFLDRIRKGFPCEARVWARILPQFLDDFFPPQDIMNKVIGEFLSNQPPY
 PQFMATVVYKVFQTLHSTGQSSMVRDWMLSLSNFTQRAPVAMATWSLSCFFVSASTSPWVAAILPHVIS
 RMGKLEQVDVNLFCLVATDFYRHQIEEELDRRAFQSVLEVVAAPGSPYHRLTCLRNHVHKVTTC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

- Tag:** C-Myc/DDK
- Predicted MW:** 347.7 kDa
- Concentration:** >0.1 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.
- Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
- RefSeq:** [NP_002102](#)
- Locus ID:** 3064
- UniProt ID:** [P42858](#)
- RefSeq Size:** 13481
- Cytogenetics:** 4p16.3

RefSeq ORF: 9432

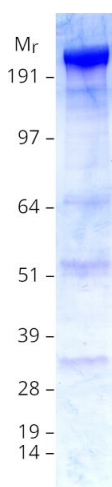
Synonyms: HD; IT15; LOMARS

Summary: Huntingtin is a disease gene linked to Huntington's disease, a neurodegenerative disorder characterized by loss of striatal neurons. This is thought to be caused by an expanded, unstable trinucleotide repeat in the huntingtin gene, which translates as a polyglutamine repeat in the protein product. A fairly broad range of trinucleotide repeats (9-35) has been identified in normal controls, and repeat numbers in excess of 40 have been described as pathological. The huntingtin locus is large, spanning 180 kb and consisting of 67 exons. The huntingtin gene is widely expressed and is required for normal development. It is expressed as 2 alternatively polyadenylated forms displaying different relative abundance in various fetal and adult tissues. The larger transcript is approximately 13.7 kb and is expressed predominantly in adult and fetal brain whereas the smaller transcript of approximately 10.3 kb is more widely expressed. The genetic defect leading to Huntington's disease may not necessarily eliminate transcription, but may confer a new property on the mRNA or alter the function of the protein. One candidate is the huntingtin-associated protein-1, highly expressed in brain, which has increased affinity for huntingtin protein with expanded polyglutamine repeats. This gene contains an upstream open reading frame in the 5' UTR that inhibits expression of the huntingtin gene product through translational repression. [provided by RefSeq, Jul 2016]

Protein Families: Druggable Genome

Protein Pathways: Huntington's disease

Product images:



Coomassie blue staining of purified HTT protein (Cat# [TP318435]). The protein was produced from HEK293T cells transfected with HTT cDNA clone (Cat# [RC218435]) using MegaTran 2.0 (Cat# [TT210002]).