

## Product datasheet for TP318435M

### 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, 100 µg  
**Species:** Human  
**Expression Host:** HEK293  
**Expression cDNA Clone or AA Sequence:** >RC218435 representing NM\_002111  
Red=Cloning site Green=Tags(s)

MATLEKLMKAFESLKSFQQQQQQQQQQQQQQQQQQQQQQQQQQPPPPPPPPPPPPQLPQPPPQAQPLLQPQP  
 PPPPPPPGPAVAEEPLHRPKKELSATKKDRVNHCLTICENIVAQSVRNSPEFQKLLGIAMELFLLCSD  
 AESDVRMVADECLNKVIKALMDSNLPRLQLELYKEIKKNGAPRSLRAALWRFELAHVLRPQKCRPYLVN  
 LLPCLTRTSKRPEESVQETLAAAVPKIMASFGNFANDNEIKVLLKAFIANLKSSSPTIRRTAAGSAVSIC  
 QHSRRTQYFYSWLLNVLLGLLVPVEDEHSTLLILGVLLTLRYLVPPLLQQQVKDTSKGSFGVTRKEMEVS  
 PSAEQLVQVYELTLHHTQHGDHNVTGALELLQQLFRTPPELLQTLTAVGGIGQLTAAKEESGGRSRSG  
 SIVELIAGGGSSCSPVLSRKQKGVLLGEEEALEDDSESRSVDVSSALTASVKDEISGELAASSGVSTPG  
 SAGHDIITEQPRSQHTLQADSVDLASCDLTSSATDGDDEEDILSHSSQVSAVPSDPAMDLDNDGTQASSPI  
 SDSSQTTEGPDSAVTPSDSSEIVLDGTDNQYLGLQIGQPQDEDEEATGILPDEASEAFRNSMALQQA  
 LLKNMSHCRQPSDSSVDKFLRDEATEPGDQENKPCRIGKDIGQSTDDDSAPLVHCVRLLSASFLLTGGK  
 NVLVPDRDVRVSVKALALSCVGAVALHPESFFSKLYKVPDLTTEYPEEQYVSDILNYIDHGDQPVRGAT  
 AILCGTLICILSRSRFHVGDWMTIRTGTGNTFSLADCIPLLRKTLKDESSVTCKLACTAVRNCVMSLC  
 SSSYSELGLLIIDVLTNRNSSYWLVRTELLETLAEIDFRLVSFLEAKAENLHRGAHHYTGLLKLQERVL  
 NNVIHLLGDEDPRVRHVAASLIRLVPKLFYKCDQGQADPVAVARDQSSVYLKLLMHETQPPSHFSVS  
 TITRIYRGYNLLPSITDVTMENNLSRVIAAVSHELITSTTRALTFGCCEALCLLSTAFPVCIWSLGHWC  
 VPPLSASDESRSCTVGMATMILTLLSSAWFPLDLSAHQDALILAGNLLAASAPKSLRSSWASEEEANPA  
 ATKQEEVWPALGDRALVPMVEQLFSHLLKVINICAHVLDVAPGPAIKAALPSLTNPPSLSPIRRKGEK  
 EPGEQASVPLSPKKGSEASAASRQSDTSGPVTTSSSSLSGFYHLPYKLVKLDVLDKATHANYKVTLDLQ  
 STEKFGFLRSALDVLSQLILELATLQDIGKCVVEILGYLKSFCFSREPMMATVCVQQLLKTFLGTNLASQF  
 DGLSSNPSKSGRAQRLGSSSVRPGLYHYCFMAYPTHFTQALADASLRNMVQAEQENDTSGWFDVLQKVS  
 TQLKTNLTSVTKNRADKNAIHNHIRLFEPLVIKALKQYTTTTCVQLQKQVLDLLAQLVQLRVNYCLLDS  
 QVFIGFVLKQFEYIEVGQFRESEAIIPNIFFLVLLSYERYHSKQIIGIPKIIQLCDGIMASGRKAVTHA  
 IPALQPIVHDLFVLRGTNKADAGKELETQKEVVSMMLRLIQYHQVLEMFILVLQQCHKENEDKWKRLSR  
 QIADIILPMLAKQMMHIDSHEALGVLNLTLEILAPSSLRPVDMLLRSMFVTPNTMASVSTVQLWISGILA  
 ILRVLISQSTEDIVLSRIQELSFSPYLISCTVINRLRDGDSTSTLEEHSSEKQIKNLPEETFSRFLQLV



GILLEDIVTKQLKVMSEQQHTFYCQELGTLMLCLIHIFKSGMFRRITAAATRLFRSDGCGGSFYTLDSL  
 NLRARSMITTHPALVLLWCQILLVNHTDYRWWAEVQQTPKRHSLSSTKLLSPQMSGEEEDSDLAALGM  
 CNREIVRRGALILFCDYVCQNLHDSEHLTWLVNHIQDLISLSHEPPVQDFISAVHRNSAASGLFIQAIQ  
 SRCENLSTPTMLKKTLCQLEGIHLSQSGAVLTLYVDRLLCTPFRVLARMVDILACRRVEMLLAANLQSSM  
 AQLPMEELNRIQEYLQSSGLAQRHQRLYSLLDRFRLSTMQDSLSPSPVSSHPLDGDGHVSLETVSPDKD  
 WYVHLVKSQCWTRSDSALLEGAELVNRIPAEDMNAFMNSEFNLSLLAPCLSLGMSEISGGQKSALFEAA  
 REVTLARVSGTVQQLPAVHHVFQPELPAEPAAYWSKLNDFGDAALYQSLPTLARALAAQYLWVSKLPSH  
 LHLPEKEKDIVKFVATLEALSWHLIHEQIPLSLDLQAGLDCCCLALQLPGLWSVVSSTEFVTHACSLI  
 YCVHFILEAVAVQPGEQLLSPERRTNTPKAISEEEEEVDPNTQNPKYITAAACEMVAEMVESLQSVLALGH  
 KRNSGVP AFLTPLLNRNIISLARLPLVNSYTRVPLVWKLGWSPKPGDFGTAFPEIPVEFLQEKEVFKE  
 FIYRINTLGWTSRTQFEETWATLLGVLVTQPLVMEQEESPEEDTERTQINVLAVQAITSVLVSAMTVPV  
 AGNPAVSCLEQQPRNKPLKALDTRFGRKLSIIRGIVEQEIQAMVSKRENIATHHLYQAWDPVPSLSPATT  
 GALISHEKLLLQINPERELGMSYKLGQVSIHSVWLGNSITPLREEEWDEEEEEADAPAPSSPPTSPVN  
 SRKHRAGVDIHSCSQFLELYSRWILPSSSAR RTPAILISEVVRSLLVSDLFTERNQFELMYVTLELR  
 RVHPSEDEILAQYLPATCKAAAVLGMDKAVAEPVSRLLESTLRSSHLP SRV GALHGVLYVLECDLLDDT  
 AKQLIPVISDYLLSNLKGIAHCVNIHSQQHVLVMCATAFYLIENYPLDVGPEFSASIIQMCVMLSGSEE  
 STPSIIYHCALRGLERLLLSEQLSRLDAESLVKLSVDRVNVHSPHRAMAALGLMLTTCMYTGKEKVSPGR  
 TSDPNPAAPDSESVIVAMERVSFLDRIRKGFPCEARVVARILPQFLDDFFPPQDIMNKVIGEFLSNQQPY  
 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

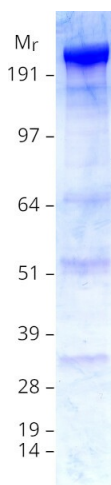
Synonyms: HD; IT15; LOMARS

**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]).