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HD Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant HD.
Catalog # AT2332a

Product Information

Application	WB, E
Primary Accession	P42858
Other Accession	NM_002111
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	4G6
Calculated MW	347603

Additional Information

Gene ID	3064
Other Names	Huntingtin, Huntington disease protein, HD protein, HTT, HD, IT15
Target/Specificity	HD (NP_002102, 81 a.a. ~ 190 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	HD Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

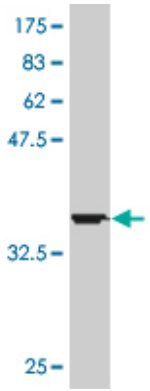
Huntingtin is a disease gene linked to Huntington's disease, a neurodegenerative disorder characterized by loss of striatal neurons. This is thought to be caused by an expanded, unstable trinucleotide repeat in the huntingtin gene, which translates as a polyglutamine repeat in the protein product. A fairly broad range in the number of trinucleotide repeats 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.

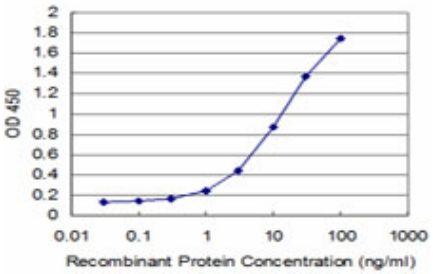
References

Systemic energy homeostasis in Huntington's disease patients. Aziz NA, et al. J Neurol Neurosurg Psychiatry, 2010 Aug 14. PMID 20710011.Mutant huntingtin-impaired degradation of beta-catenin causes neurotoxicity in Huntington's disease. Godin JD, et al. EMBO J, 2010 Jul 21. PMID 20531388.Tracking mutant huntingtin aggregation kinetics in cells reveals three major populations that include an invariant oligomer pool. Olshina MA, et al. J Biol Chem, 2010 Jul 9. PMID 20444706.Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.Prevalence of incompletely penetrant Huntington's disease alleles among individuals with major depressive disorder. Perlis RH, et al. Am J Psychiatry, 2010 May. PMID 20360314.

Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.84 KDa) .



Detection limit for recombinant GST tagged HD is approximately 0.3ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.