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HD Antibody (monoclonal) (M11)

Mouse monoclonal antibody raised against a partial recombinant HD.
Catalog # AT2333a

Specification

HD Antibody (monoclonal) (M11) - Product Information

Application	**WB, IHC, E**
Primary Accession	P42858
Other Accession	NM_002111
Reactivity	**Human**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG2a Kappa**
Calculated MW	**347603**

HD Antibody (monoclonal) (M11) - 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
IHC~~1:100~500
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) (M11) is for research use only and not for use in diagnostic or therapeutic procedures.

HD Antibody (monoclonal) (M11) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

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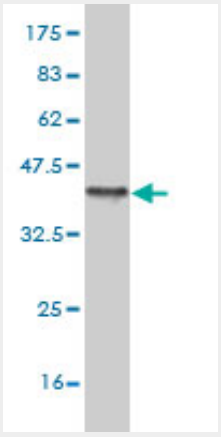
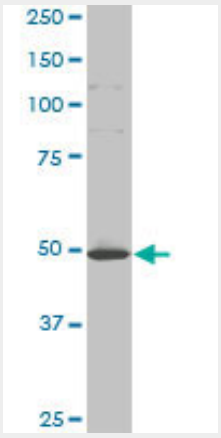
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

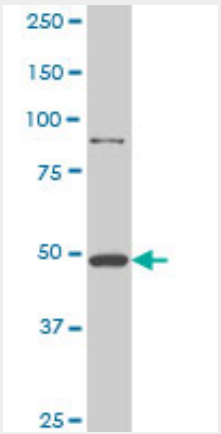
HD Antibody (monoclonal) (M11) - Images



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



HD monoclonal antibody (M11), clone 3F1. Western Blot analysis of HD expression in U-2 OS ((Cat # AT2333a)



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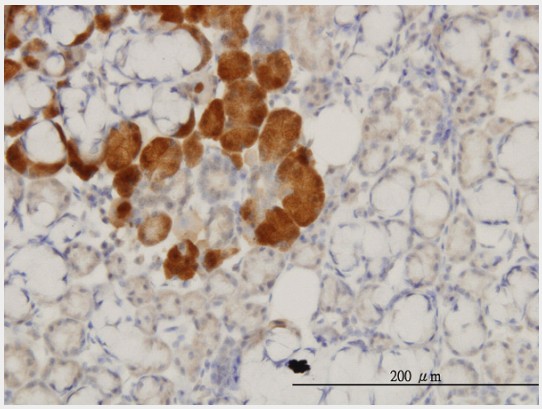
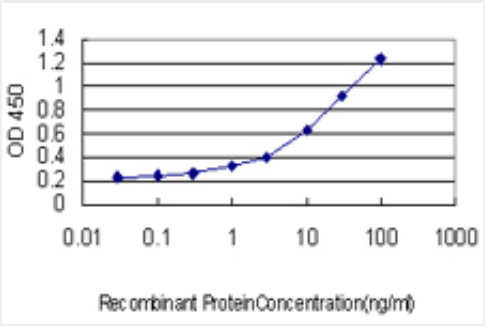
HD monoclonal antibody (M11), clone 3F1 Western Blot analysis of HD expression in Hela S3 NE ((Cat # AT2333a)



Immunoperoxidase of monoclonal antibody to HD on formalin-fixed paraffin-embedded human salivary gland. [antibody concentration 3 ug/ml]



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

HD Antibody (monoclonal) (M11) - 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.

HD Antibody (monoclonal) (M11) - 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.