

**MOUSE ANTI-HUNTINGTIN PROTEIN  
MONOCLONAL ANTIBODY**

<b>CATALOG NUMBER:</b>	MAB2166	<b>QUANTITY:</b>	100 µL
<b>LOT NUMBER:</b>			
<b>ALTERNATE NAMES:</b>	Huntington's disease protein; HD protein		
<b>BACKGROUND:</b>	<p>Huntington disease (HD) is a hereditary, progressive, neurodegenerative ailment characterized by personality changes, motor impairment and subcortical dementia. The molecular basis of the disease involves the expansion of the trinucleotide CAG, coding for polyglutamine in the first exon of a chromosome four gene (4p16.3), which normally produces a widely expressed 3136 aa (~350 kDa) protein huntingtin with unclear function. The protein is found in the perinuclear region along with microtubules, and in the centrosomal region along with gamma-tubulin. Huntingtin is necessary for neuronal survival and is involved in synaptic vesicle trafficking, microtubule binding and may also have a role in apoptosis. In the HD condition, neuronal cells with the mutant form of huntingtin possess intranuclear aggregations of the N-terminal fragment, causing damaging inclusions in perinuclear locations and striatal neuron cell death. Wild-type huntingtin and anti-huntingtin reduce aggregation and cellular toxicity of the mutant huntingtin form in mammalian cell models of HD. Huntingtin is known to interact with GAPDH, HAP-1, SP1 and TAFII130.</p>		
<b>SPECIFICITY:</b>	Huntingtin Protein. No detectable cross reactivity to other proteins by Western blot.		
<b>EPITOPE:</b>	a.a. 181-810		
<b>IMMUNOGEN:</b>	Huntingtin fragment from aa 181 to 810 as a fusion protein		
<b>HOST/ISOTYPE:</b>	Ms IgG1, kappa		
<b>CLONE NAME:</b>	1HU-4C8		
<b>APPLICATIONS:</b>	<p><u>ELISA</u>: 1:500-1:5,000. <u>Western blot</u>: 1:500-1:5,000. Should detect a band migrating at approximately 350-400 kDa by Western blot (<i>Nature Genetics</i> <b>10</b>:104-110.). <u>Immunohistochemistry</u> on frozen and microwave oven treated paraffin sections (human tissue): 1:500-1:5,000. <u>Immunocytochemistry</u> on transfected cells: 1:500-1:5,000. <u>Immunoprecipitation</u>: 1:500-1:5,000. Optimal working dilutions must be determined by the end user.</p>		
<b>SPECIES REACTIVITY:</b>	Reacts with human, rat, mouse, monkey and hamster. Reactivity with other species is unknown.		
<b>FORMAT:</b>	Ascites		
<b>PRESENTATION:</b>	Liquid containing no preservative		
<b>STORAGE/HANDLING:</b>	Maintain at -20°C in undiluted aliquots up to 12 months after date of receipt. Avoid repeated freeze/thaw cycles.		

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