

## Huntingtin (phospho Ser421) Polyclonal Antibody

<b>Catalog No :</b>	YP1000
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	IHC;IF;ELISA
<b>Target :</b>	Huntingtin
<b>Fields :</b>	>>Huntington disease;>>Pathways of neurodegeneration - multiple diseases
<b>Gene Name :</b>	HTT
<b>Protein Name :</b>	Huntingtin
<b>Human Gene Id :</b>	3064
<b>Human Swiss Prot No :</b>	P42858
<b>Mouse Gene Id :</b>	15194
<b>Mouse Swiss Prot No :</b>	P42859
<b>Rat Swiss Prot No :</b>	P51111
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human Huntingtin around the phosphorylation site of Ser421. AA range:387-436
<b>Specificity :</b>	Phospho-Huntingtin (S421) Polyclonal Antibody detects endogenous levels of Huntingtin protein only when phosphorylated at S421.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

**Concentration :** 1 mg/ml

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**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

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**Molecularweight :** 348kD

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**Cell Pathway :** Huntington's disease;

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**Background :** huntingtin(HTT) Homo sapiens 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 widespread

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**Function :** disease:Defects in HTT are the cause of Huntington disease (HD) [MIM:143100]. HD is an autosomal dominant neurodegenerative disorder characterized by involuntary movements (chorea), general motor impairment, psychiatric disorders and dementia. Onset of the disease occurs usually in the third or fourth decade of life and symptoms progressively worsen leading to death in 10 to 20 years. Onset and clinical course depend on the degree of poly-Gln repeat expansion, longer expansions resulting in earlier onset and more severe clinical manifestations. HD affects 1 in 10,000 individuals of European origin. Neuropathology of Huntington disease displays a distinctive pattern with loss of neurons, especially in the caudate and putamen (striatum).,function:May play a role in microtubule-mediated transport or vesicle function.,online information:Huntingtin entry,polymorphism:The poly-Gln region of HT

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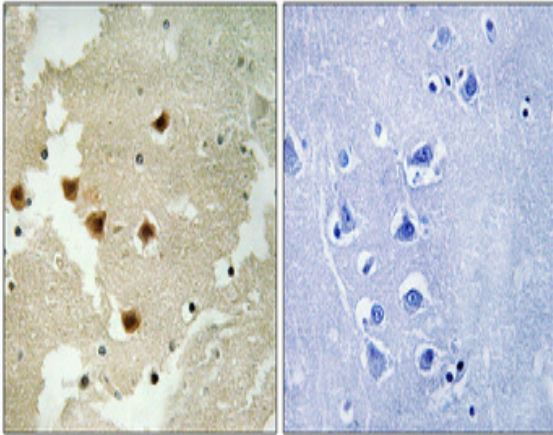
**Subcellular Location :** [Huntingtin]: Cytoplasm . Nucleus . Early endosome . The mutant Huntingtin protein colocalizes with AKAP8L in the nuclear matrix of Huntington disease neurons. Shuttles between cytoplasm and nucleus in a Ran GTPase-independent manner (PubMed:15654337). Recruits onto early endosomes in a Rab5- and HAP40-dependent fashion (PubMed:16476778). .; [Huntingtin, myristoylated N-terminal fragment]: Cytoplasmic vesicle, autophagosome .

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**Expression :** Expressed in the brain cortex (at protein level). Widely expressed with the highest level of expression in the brain (nerve fibers, varicosities, and nerve endings). In the brain, the regions where it can be mainly found are the cerebellar cortex, the neocortex, the striatum, and the hippocampal formation.

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## Products Images



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.