

Rabbit Huntingtin Polyclonal Antibody | anti-Huntingtin antibody

Phospho-Huntingtin (Ser421)[Ser419] Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329661	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (89%), Dog (89%), Chicken (100%)	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Huntingtin; Polyclonal Antibody; Phospho-Huntingtin (Ser421)[Ser419] Antibody; AI256365; C430023I11Rik; HD; HD protein; HD_HUMAN; HDH; HTT; HUNTINGTON CHOREA; Huntington disease protein; Huntington's disease protein homolog; IT 15; IT15; OTTMUSP00000026909; ZHD; anti-Huntingtin antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (89%), Dog (89%), Chicken (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-Huntingtin (Ser421) Antibody detects endogenous levels of Huntingtin only when phosphorylated at Ser419, which site historically referenced as Ser421. Tissue Specificity: 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.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-Huntingtin antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Huntingtin around the phosphorylation site of Ser421.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Cleaved by caspases downstream of the polyglutamine stretch. The resulting N-terminal fragments are cytotoxic and provokes apoptosis. Forms with expanded polyglutamine expansion are specifically ubiquitinated by SYVN1, which promotes their proteasomal degradation. Phosphorylation at Ser-1179 and Ser-1199 by CDK5 in response to DNA damage in nuclei of neurons protects neurons against polyglutamine expansion as well as DNA damage mediated toxicity. Myristoylated at Gly-551, following proteolytic cleavage at Asp-550.
Subunit Structure	Interacts with PFN1. Interacts through its N-terminus with PRPF40A. Interacts with PQBP1. Interacts with SETD2. Interacts with SH3GLB1 (By similarity). Interacts with SYVN. Interacts with TPR; the interaction is inhibited by forms of Huntingtin with expanded polyglutamine stretch. Interacts with ZDHHC13 (via ANK repeats). Interacts with ZDHHC17 (via ANK repeats). Interacts with F8A1/F8A2/F8A3. Found in a complex with F8A1/F8A2/F8A3, HTT and RAB5A; mediates the recruitment of HTT by RAB5A.
Similarity	The N-terminal Gln-rich and Pro-rich domain has great conformational flexibility and is likely to exist in a fluctuating equilibrium of alpha-helical, random coil, and extended conformations. Belongs to the huntingtin family.

Subcellular Location	Cytoplasm. Nucleus. Early endosome. Note: 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).Cytoplasmic vesicle>Autophagosome.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
At 1/200 staining Human breast tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemisry)
At 1/200 staining Mouse lung tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary antibody.



IHC (Immunohiostchemistry)
Staining Rat kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary antibody.



WB (Western Blot)
Western blot analysis of extracts from EGF treated HepG2 cells, using Phospho-Huntingtin (Ser421) Antibody.-/+ means absence or presence of N peptidei¼non-phospho peptide) and P peptide(phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-Huntingtin antibody	May play a role in microtubule-mediated transport or vesicle function.Promotes the formation of autophagic vesicles.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	90903231
NCBI GeneID	3064
NCBI Accession #	NP_002102.4
NCBI GenBank Nucleotide #	NM_002111.7
UniProt Accession #	P42858; Q9UQB7
Molecular Weight	347,603 Da
NCBI Official Full Name	huntingtin
NCBI Official Synonym Full Names	huntingtin
NCBI Official Symbol	HTT
NCBI Official Synonym Symbols	HD; IT15
NCBI Protein Information	huntingtin; huntington disease protein
UniProt Protein Name	Huntingtin
UniProt Gene Name	HTT
UniProt Synonym Gene Names	HD; IT15; HD protein

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/huntingtin-antibody-peptide-elisa-immunohistochemistry-western-blot-elisa/329661>