

Anti-Huntingtin Antibody

Catalog # ABO11577

Specification

Anti-Huntingtin Antibody - Product Information

ApplicationWBPrimary AccessionP42858HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Huntingtin(HTT) detection. Tested with WB inHuman;Mouse;Rat.Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Huntingtin Antibody - Additional Information

Gene ID 3064

Other Names Huntingtin, Huntington disease protein, HD protein, HTT, HD, IT15

Calculated MW wildtype HTT may function in the nucleus in the assembly of nuclear matrix-bound protein complexes involved with transcriptional repression and RNA processing." KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

Subcellular Localization

Tissue Specificity Huntingtin;Huntington disease protein;HD protein;HTT;HD, IT15;

Source Huntingtin

Protein Name 347603 MW

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human



Huntingtin(3106-3121aa ELDRRAFQSVLEVVAA), different from the related mouse and rat sequences by two amino acids.

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities

Cytoplasm. Nucleus. 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.

Anti-Huntingtin Antibody - Protein Information

Name HTT

Synonyms HD, IT15

Function

[Huntingtin]: May play a role in microtubule-mediated transport or vesicle function.

Cellular Location

[Huntingtin]: 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)

Tissue Location

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

Anti-Huntingtin Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Huntingtin Antibody - Images





Anti-Huntingtin antibody, ABO11577, All Western blottingAll lanes: Anti-HTT(ABO11577) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: U87 Whole Cell Lysate at 40ugPredicted bind size: 348KDObserved bind size: 348KD

Anti-Huntingtin Antibody - Background

The huntingtin gene, also called HTT or HD(Huntington disease) gene, is the IT15(interesting transcript 15") gene which codes for a protein called the huntingtin protein. It is mapped to 4p16.3. The protein has no sequence homology with other proteins and is highly expressed in neurons and tests in humans and rodents. HTT upregulates the expression of Brain Derived Neurotrophic Factor(BDNF) at the transcription level