

# Anti-Huntington (RABBIT) Antibody

Huntington Antibody Catalog # ASR5676

## Specification

# Anti-Huntington (RABBIT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Human Rat, Human, Mouse Polyclonal WB, IHC, E, I, LCI Anti-Huntingtin antibody has been tested by ELISA and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~350 kDa corresponding to the appropriate cell lysate or extract
Physical State Buffer	Liquid (sterile filtered) 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Huntington affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the near N-terminus of human Huntington disease protein.
Stabilizer	50% (v/v) Glycerol

## Anti-Huntington (RABBIT) Antibody - Additional Information

Gene ID 3064

Other Names 3064

### Purity

Anti-Huntingtin was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is specific towards HTT. A BLAST analysis was used to suggest cross-reactivity with Human, Mouse, and Rat based on 100% sequence homology. Cross-reactivity with HTT from other sources has not been determined.

### Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

### **Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.



# Anti-Huntington (RABBIT) 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-Huntington (RABBIT) Antibody - Protocols

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

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

### Anti-Huntington (RABBIT) Antibody - Images



Western Blot of Rabbit Anti-Huntington antibody. Lane 1: mouse brain extract absence of blocking peptide. Lane 2: mouse brain extract with blocking peptide. Load: 10  $\mu$ g per lane. Primary antibody: Huntington antibody at 0.1  $\mu$ g/mL for overnight at 4°C. Secondary antibody:



IRDye800<sup>™</sup> rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 350 kDa for Huntington. Other band(s): Huntington splice variants and isoforms.

### Anti-Huntington (RABBIT) Antibody - Background

Huntingtin (also known as Huntington's disease protein, Htt and HD protein) is the protein product of a disease gene linked to Huntington's disease, a neuro-degenerative disorder characterized by loss of striatal neurons. This may be caused by an expanded, unstable trinucleotide repeat in the huntingtin gene, which translates as a polyglutamine repeat in the protein product (see partial protein sequence below). The huntingtin gene locus is large, spanning 180 kb and consisting of 67 exons. It is expressed as 2 alternatively polyadenylated forms displaying different relative abundance in various fetal and adult tissues. 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. Normal huntingtin protein shows a cytoplasmic localization. This protein is 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-Huntington antibodies are ideal for researchers interested in Apoptosis, Autophagy, Cytoskeleton, Neurodegeneration, Neuroscience, and Neuronal Cell Markers research.