# abcam

# Product datasheet

# Alexa Fluor® 488 Anti-Huntingtin antibody [EPR5526] ab197506

Recombinant RabMAb

# 2 Images

#### Overview

**Product name** Alexa Fluor® 488 Anti-Huntingtin antibody [EPR5526]

**Description** Alexa Fluor® 488 Rabbit monoclonal [EPR5526] to Huntingtin

**Host species** Rabbit

Conjugation Alexa Fluor® 488, Ex: 495nm, Em: 519nm

**Tested applications** Suitable for: ICC/IF

Unsuitable for: Flow Cyt (Intra)

Species reactivity Reacts with: Mouse

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control ICC/IF: Neuro-2a cells.

**General notes** This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

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### **Properties**

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), PBS, 1% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number EPR5526

**Isotype** IgG

# **Applications**

#### The Abpromise guarantee

Our Abpromise quarantee covers the use of ab197506 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/100.

**Application notes** Is unsuitable for Flow Cyt (Intra).

### **Target**

**Function** May play a role in microtubule-mediated transport or vesicle function.

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.

Involvement in 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).

**Sequence similarities** Belongs to the huntingtin family.

Contains 10 HEAT repeats.

**Domain**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.

# Post-translational modifications

Cleaved by apopain downstream of the polyglutamine stretch. The resulting N-terminal fragment is

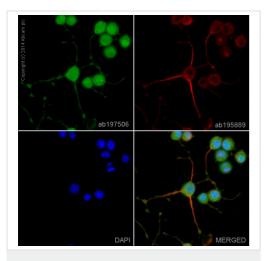
cytotoxic and provokes apoptosis.

Forms with expanded polyglutamine expansion are specifically ubiquitinated by SYVN1, which promotes their proteasomal degradation.

#### **Cellular localization**

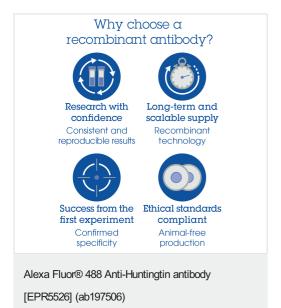
Cytoplasm. Nucleus. The mutant Huntingtin protein colocalizes with AKAP8L in the nuclear matrix of Huntington's disease neurons.

#### **Images**



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Huntingtin antibody [EPR5526] (ab197506) ab197506 staining Huntingtin in Neuro-2a differentiated cells. The cells were fixed with 100% methanol (5 min), permeabilised in 0.1% Triton X-100 for 5 minutes and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated with ab197506 at 1/100 dilution (shown in green) and <a href="mailto:ab195889">ab195889</a>, Mouse monoclonal [DM1A] to alpha Tubulin (Alexa Fluor® 594, shown in red) at 1/167 dilution overnight at +4°C. Nuclear DNA was labelled in blue with DAPI.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



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