abcam

Product datasheet

Biotin Anti-pro Caspase-3 antibody [E61] ab204632



2 Images

Overview

Product name Biotin Anti-pro Caspase-3 antibody [E61]

Biotin Rabbit monoclonal [E61] to pro Caspase-3 **Description**

Host species Rabbit Conjugation **Biotin**

Specificity The antibody only recognizes the pro-form of Caspase-3. It does not react with the cleaved forms

(active enzyme) of Caspase-3.

Suitable for: IHC-P **Tested applications** Reacts with: Human Species reactivity

Predicted to work with: Mouse

Immunogen Synthetic peptide within Human pro Caspase-3 (N terminal). The exact sequence is proprietary.

Positive control IHC-P: FFPE, normal human tonsil tissue.

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.

Properties

Form

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

Stable for 12 months at -20°C. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

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

Purity Protein A purified

Clonality Monoclonal

Clone number E61
Isotype IqG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab204632 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
IHC-P		1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

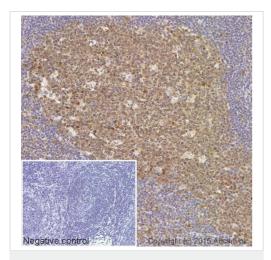
Relevance

Caspases are a family of cysteine proteases that are key mediators of programmed cell death or apoptosis. The precursor form of all caspases is composed of a prodomain, and large and small catalytic subunits. The active forms of caspases are generated by several stimuli including ligand-receptor interactions, growth factor deprivation and inhibitors of cellular functions. All known caspases require cleavage adjacent to aspartates to liberate one large and one small subunit, which associate into a2b2 tetramer to form the active enzyme. Gene for Caspase 3 also known as Yama, CPP32, and apopain codes for a 32-kDa protein. Caspase 3 cleaves the death substrate poly(ADP-ribose) polymerase (PARP) to a specific 85 kDa form observed during apoptosis and is inhibitable by the CrmA protein. Other Caspase 3 substrates include DNA-PK, actin, GAS2, and procaspase-6, etc. Caspase 3 is activated by cleavage events at Asp-28/Ser-29 (between N-terminal pro-domain) and Asp-175/Ser-176 (between large and small subunits) to generate a large subunit of 17-kDa and a small subunit of 12-kDa.

Cellular localization

Cytoplasmic

Images

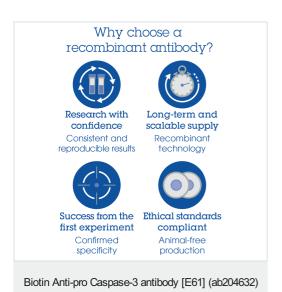


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Biotin Anti-pro Caspase-3 antibody [E61] (ab204632)

IHC image of pro Caspase-3 staining in a section of formalin-fixed paraffin-embedded normal human tonsil*, performed on a Leica BondTM system using the standard protocol B. The section was pretreated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins, before blocking of endogenous biotin. The section was then incubated with ab204632, 1/100 dilution, for 15 mins at room temperature and detected using an HRP conjugated ABC system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset negative control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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