

DATASHEET

Caspase-3 Rabbit Monoclonal Antibody(ARB583)

CAT. NO. ARB6875

KEY FEATURES

Target	Caspase-3	Clonality	Monoclonal
Clone ID	ARB583	Applications	IHC
Source / Host	Rabbit	Dilution	1:100-1:200
Reactivity	Human	Storage	at-20°C

BACKGROUND

Caspase-3 is a key executioner cysteine-aspartic protease in the caspase family, essential for mediating apoptosis. It exists as an inactive zymogen (pro-caspase-3) and is activated by proteolytic cleavage via initiator caspases (caspase-8, -9) in response to extrinsic (death receptor) or intrinsic (mitochondrial) apoptotic signals. Caspase-3 is mainly expressed in tissues with high cellular turnover or apoptotic activity, including immune organs (thymus, spleen, bone marrow), developing tissues (embryonic structures, placenta), epithelia (intestinal mucosa, skin) and glands (mammary, prostate). Caspase-3, particularly its cleaved active form, serves as a gold-standard biomarker for detecting apoptosis in clinical histopathology. Immunohistochemical (IHC) staining for cleaved Caspase-3 is routinely used to confirm apoptotic activity in tumors post-therapy (chemotherapy/radiotherapy), where activation correlates with treatment efficacy.

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

IHC	1:100 - 1:200
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*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

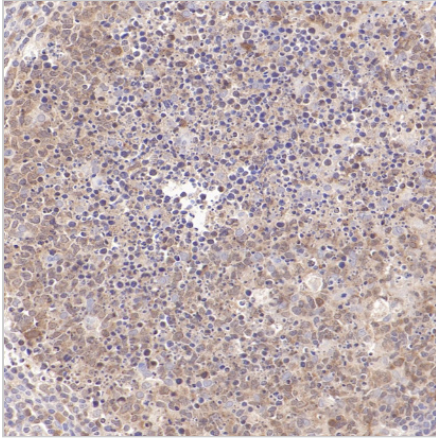
Predicted Molecular Wt	32kDa
Purity	ProA affinity purified IgG
Subcellular location	Cytoplasm and nucleus
Swissprot ID	P42574
Immunogen	Synthetic peptide.
Storage Buffer	PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%
Recommended Method	Heat induced epitope retrieval with Tris-EDTA buffer (pH 9.0), primary antibody incubate at RT (18°C-25°C) for 30 minutes.

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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DATA

Immunohistochemical staining of human tonsil tissue using Caspase-3 Rabbit Monoclonal Antibody(ARB583)

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.

More information: www.arexbio.com