

Rabbit Caspase-14 Polyclonal Antibody | anti-Casp14 antibody

Polyclonal Antibody to Caspase-14

CATALOG # AAA78321	HOST Rabbit	REACTIVITY Dog, Gerbil, Human, Mouse, Rat	APPLICATIONS Immunoprecipitation, Immunohistochemistry, Western Blot
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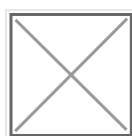
PRODUCT SYNONYMS

Caspase-14; Polyclonal Antibody; Polyclonal Antibody to Caspase-14; Casp14; Mini-ICE; Antibody to Caspase-14; Anti-Caspase-14 Antibody; Caspase-14 Antibody; anti-Casp14 antibody

PRODUCT SPECIFICATIONS

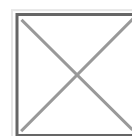
Host	Rabbit
Reactivity	Dog, Gerbil, Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	Serum
Form/Format	50 ul sera
Sequence Length	257
Applicable Applications for anti-Casp14 antibody	IP (Immunoprecipitation), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen Information	A recombinant full-length human Caspase-14 protein was used as the immunogen for this antibody
Antigen	Caspase-14
Preparation and Storage	Store the antibody at 4 degree C, stable for 6 months. For long-term storage, store at -20 degree C. Avoid repeated freeze and thaw cycles.

IMAGES



IHC (Immunohistochemistry)

Fig: 3 Formalin-fixed paraffin-embedded tissue sections of human cervix stained for Caspase-14 expression using at 1: 2000. A. Normal cervix (squamous epithelium). B. CIN1 (low-grade squamous intraepithelial lesion, mild dysplasia). C. CIN2 (high-grade squamous intraepithelial lesion, moderate dysplasia). D. CIN3 (high-grade squamous intraepithelial lesion; severe dysplasia-carcinoma in situ). In normal cervi, caspase-14 staining was found most in the midzone layer, but was absent from the basal/parabasal cell layer where mitotically active cells are known to reside. This suggests induction of caspase-14 expression with differentiation. Caspase-14 expression declined progressively during malignant transformation as the histologic severity of the cervical atypia advanced from CIN1 to CIN3. Hematoxylin-eosin counterstain.



IHC (Immunohistochemistry)

Fig: 2 Formalin-fixed paraffin-embedded sections from a human ovarian cancer tissue microarray stained for Caspase-14 expression using at 1: 2000. Low (A) and high (B) stage ovarian tumor tissue cores. High magnification from areas of the tissue cores (A1 and B1). Decreased Caspase-14 expression was seen in the high grade, compared to the low grade tumor. Hematoxylin-eosin counterstain.



WB (Western Blot)

Fig: 1 Western blot analysis of Caspase-14. Tissue lysates (50 ug/lane) and recombinant human Caspase-14 were (Hu C14, 15 ng) were Fig: 1 Western blotted with Caspase-14 antibody at 1: 2000. The antibody detected both the proform of caspase-14, and the large and small subunits of active/cleaved caspase-14.

ADDITIONAL INFORMATION

Related Product Information for anti-Casp14 antibody	Apoptosis, or programmed cell death, is a common property of all multicellular organisms. The current dogma of apoptosis suggests that the components of the core celldeath machinery are integral to cells and widely conserved across species. Caspases are typically divided into 3 major groups, depending on the structure of their prodomain and their function. Group I: inflammatory caspases (caspases 1, 4, 5, 11, 12, 14). Group II: initiator of apoptosis caspases (2, 8, 9). Group III: effector caspases (3, 6, 7). Caspases are constitutively expressed in almost all cell types as inactive proenzymes (zymogens: enzyme precursors which require a biochemical change to become active enzymes) that are processed and activated in response to a variety of pro-apoptotic or inflammatory stimuli. The procaspases (32-56 kDa) contain four domains: an N-terminal prodomain (2-25 kDa), a large subunit (p20: 17-21 kDa), a small subunit (p10: 10-13 kDa) and a short linker region between the large and small subunits. Caspase activation involves proteolytic processing of the proenzyme at specific aspartate residues between the domains. This results in removal of the prodomain as well as the linker region and formation of a heterodimer containing one large and one small subunit (p20-p10). Active caspases mediate cell death and inflammation through cleavage of particular cellular substrates that are involved in these processes. Caspase-14 activation has been implicated in keratinocyte senescence which leads to the cornified cell layer, suggesting a role for caspase-14 in epithelial cell differentiation. Tumor-specific alterations in caspase-14 expression have been found in epithelial malignancies, suggesting that caspase-14 plays a role in epithelial cell transformation. This antibody recognizes the proform of caspase-14 (~28-32 kDa), and the large (~14-21 kDa) and small (~10-11 kDa) of active/cleaved caspase-14.
Product Categories/Family for anti-Casp14 antibody	Antibodies; Apoptosis

NCBI AND UNIPROT INFORMATION

NCBI GI #	10720035
NCBI GeneID	12365
UniProt Accession #	O89094
Molecular Weight	18,224 Da
NCBI Official Full Name	Caspase-14
NCBI Official Synonym Full Names	caspase 14
NCBI Official Symbol	Casp14
NCBI Official Synonym Symbols	MICE; mini-ICE
NCBI Protein Information	caspase-14
UniProt Protein Name	Caspase-14
UniProt Gene Name	Casp14
UniProt Synonym Gene Names	CASP-14; MICE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.