

Product name:	Caspase-14 (7P17) Rabbit Monoclonal Antibody
Cat number:	MABN07965
Conjugate:	Unconjugated
Size:	100µL
Clone:	Monoclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	A synthetic peptide of human Caspase-14
Reactivity:	Human, Mouse, Rat
Applications:	WB 1:1000-1:5000, IHC 1:100-1:200, ICC/IF 1:100-1:200, FC 1:10-1:100, IP 1:10-1:100
Molecular Weight:	28kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.
Background:	Caspases are a family of cysteine proteases that play an essential role in carrying out apoptosis. Caspase-14, also named MICE, is a unique member of the caspase family with restricted expression; it is found in embryonic tissues and adult skin. Caspase-14 is weakly processed into p18 and p11 subunits by caspase-8. May also be responsible for proteolytic processing of filaggrin during terminal differentiation of keratinocytes. Non-apoptotic caspase involved in epidermal differentiation. Is the predominant caspase in epidermal stratum corneum (PubMed:15556625). Seems to play a role in keratinocyte differentiation and is required for cornification. Regulates maturation of the epidermis by proteolytically processing filaggrin (By similarity). In vitro has a preference for the substrate [WY]-X-X-D motif and is active on the synthetic caspase substrate WEHD-ACF (PubMed:16854378, PubMed:19960512). Involved in processing of prosaposin in the epidermis (By similarity). May be involved in retinal pigment epithelium cell barrier function (PubMed:25121097). Involved in DNA degradation in differentiated keratinocytes probably by cleaving DFFA/ICAD leading to liberation of DFFB/CAD (PubMed:24743736).