

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human Caspase-14 in direct ELISA and Western Blot.                                                                                                                                                                                                                  |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 868715                                                                                                                                                                                                                           |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human Caspase-14<br>Ser2-Gln242<br>Accession # P31944                                                                                                                                                                                   |
| <b>Conjugate</b>          | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

Caspase-14 belongs to the evolutionarily conserved caspase family of cysteinyl aspartate-specific proteinases that frequently play a central role in apoptosis. Caspases exist as inactive proenzymes that undergo proteolytic processing at conserved aspartic residues to produce large and small subunits that dimerize to form an active enzyme. Caspase-14 is processed to form p19 and p10 subunits, but unlike many caspases, this activation is believed to be non-apoptotic. Expressed within hair follicles and sebaceous glands in the epidermis, Caspase-14 processing is implicated in terminal keratinocyte differentiation and cornification. Caspase-14 expression may also protect against psoriasis and epidermal UVB photodamage. Full-length human Caspase-14 is 242 amino acids (aa) in length, and shares 71% and 72% aa sequence identity with mouse and rat Caspase-14, respectively.

## PRODUCT SPECIFIC NOTICES

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