

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human CXCL14/BRAK in direct ELISAs and Western blots. In direct ELISAs, less than 20% cross-reactivity with recombinant mouse CXCL14/BRAK is observed.                                                                                                              |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human CXCL14/BRAK (R&D Systems, Catalog # 866-CX)<br>Ser23-Glu99<br>Accession # O95715                                                                                                                                                  |
| <b>Conjugate</b>          | Alexa Fluor 594<br>Excitation Wavelength: 590 nm<br>Emission Wavelength: 617 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.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

#### BACKGROUND

CXCL14/BRAK (breast and kidney-expressed chemokine), also named MIP-2 gamma, KEC (kidney-expressed chemokine), and BMAC (B cell and monocyte-activating chemokine), is a member of CXC chemokine superfamily (1 - 5). The deduced 99 amino acid (aa) residue precursor has a 22 aa putative signal peptide that is cleaved to produce the 77 aa mature protein. Mature human and mouse CXCL14 differ by only 2 residues. Human CXCL14 shares approximately 30% aa sequence identity with MIP-2α (GROβ) as well as MIP-2β (GROγ). The gene for CXCL14 has been mapped human chromosome 5q31. Unlike the MIP-2 chemokines, CXCL14 lacks the ELR domain preceding the CXC motif. CXCL14 transcripts are constitutively expressed at high levels in the basal layer of epidermal keratinocytes and dermal fibroblasts of skin tissues as well as lamina propria cells in normal intestinal tissues. CXCL14 has been shown to be a highly selective chemoattractant for monocytes that have been treated with prostaglandin E<sub>2</sub> or forskolin, agents that activate adenylate cyclase. CXCL14 has been proposed to be important for regulating the trafficking of macrophage precursor to regions in skin and mucosal tissues that support their development. Consistent with this hypothesis, macrophages were frequently found to co-localize with CXCL14-producing cells in the dermis and lamina propria.

#### PRODUCT SPECIFIC NOTICES

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