

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Chemerin in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 20% cross-reactivity with recombinant human Chemerin is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse Chemerin Thr17-Ser156 Accession # Q9DD06
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

Neutralization	Optimal dilution of this antibody should be experimentally determined.
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

Mouse Chemerin, also known as Tazarotene-induced Gene-2 (TIG2), is a new, but distant member of the cystatin superfamily (1-3). Members of this superfamily contain at least two intrachain disulfide bonds and an α -helical structure over a distance of about 100 amino acids (2, 3). Chemerin is synthesized as a 162 amino acid (aa) precursor that contains a hydrophobic N-terminal sequence, an intervening 140 aa cystatin-fold containing domain, and a six aa C-terminal prosegment (4-6). Within the cystatin-fold domain there are three intrachain disulfide bonds that contribute to the characteristic fold (4, 7). The precursor molecule is described as undergoing proteolytic processing at both termini by unknown proteases. The N-terminal 16 residue hydrophobic segment is described as being either a signal sequence or a transmembrane (TM) segment for a type II TM protein (5, 8). In either case it gives rise to a soluble proform that undergoes further processing at the C-terminus (5). In mouse, the C-terminal six residues are cleaved, giving rise to a monomeric, 16 kDa heparin-binding bioactive molecule (aa 17-156) (5-7). A shorter form has been described in human (7). The activity seems to be concentrated in the nine aa's preceding the prosegment (aa 148-156). Retention of the prosegment blocks activity (4). The 140 aa mature segment is known to bind to the G-protein coupled receptor termed ChemR23 (5, 7). Binding results in macrophage and immature dendritic cell chemotaxis (5). The distribution of this receptor is limited to immune APCs, and it is assumed that Chemerin is an inflammatory molecule. It is unclear which cells are actually producing Chemerin, but keratinocytes, endothelial cells and osteoclasts are potential candidates (1, 7). Mature mouse Chemerin shares 67%, 84%, and 82% aa sequence identity to human, rat, and hamster Chemerin, respectively (6). There is apparently cross-species activity for the protein (6).

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.