

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TFAF1/FAM19A1 in direct ELISAs and Western blots. In direct ELISAs, approximately 15% cross-reactivity with recombinant human (rh) TFAF3 and rhTFAF4 is observed, less than 10% cross-reactivity with rhTFAF2 is observed and less than 1% cross-
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human TFAF1/FAM19A1 Ser26-Thr133 Accession # NP_998774
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 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.
Immunohistochemistry	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

TFAF1 (also FAM19A1) is a secreted, 13 kDa member of the FAM19/TFAF family of chemokine-like proteins (1). It is synthesized as a 133 amino acid (aa) precursor that contains a 19 aa signal sequence and a 114 aa mature chain. Like other members of the FAM19/TFAF family, mature TFAF1 contains 10 regularly spaced cysteine residues that follow the pattern CX7CCX13CXCCX14CX11CX4CX5CX10C, in which C represents a conserved cysteine residue and X represents a noncysteine amino acid (1). Human TFAF1 is 100% aa identical to mouse TFAF1. TFAF1 is expressed exclusively in the brain, with highest expression in the frontal cortex, temporal cortex, occipital cortex, parietal cortex and medulla, and low levels in the basal ganglion, thalamus, and cerebellum (1). The biological functions of TFAF family members remain to be determined, but there are a few tentative hypotheses. First, TFAFs may modulate immune responses in the CNS by functioning as brain-specific chemokines, and may act with other chemokines to optimize the recruitment and activity of immune cells in the CNS (1). Second, TFAFs may represent a novel class of neurokinins that act as regulators of immune nervous cells (1, 2). And third, TFAFs may control axonal sprouting following brain injury (1).

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.