

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TFA1/FAM19A1 in direct ELISAs and Western blots. In direct ELISAs, approximately 15% cross-reactivity with recombinant human (rh) TFA3 and rhTFA4 is observed, less than 10% cross-reactivity with rhTFA2 is observed and less than 1% cross-
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human TFA1/FAM19A1 Ser26-Thr133 Accession # NP_998774
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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

TFA1 (also FAM19A1) is a secreted, 13 kDa member of the FAM19/TFA 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/TFA family, mature TFA1 contains 10 regularly spaced cysteine residues that follow the pattern CX7CCX13CXCX14CX11CX4CX5CX10C, in which C represents a conserved cysteine residue and X represents a noncysteine amino acid (1). Human TFA1 is 100% aa identical to mouse TFA1. TFA1 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 TFA 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

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