

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TFA1/FAM19A1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human TFA2, 3, 4, or 5 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 492821
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human TFA1/FAM19A1 Ser26-Thr133 Accession # Q7Z5A9
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.

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

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 CX7CCX13CX14CX11CX4CX5CX10C, 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). First, TFA1s 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, TFA1s may represent a novel class of neurokinins that act as regulators of immune nervous cells (1, 2). And third, TFA1s may control axonal sprouting following brain injury (1).

PRODUCT SPECIFIC NOTICES

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