

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TFA2/FAM19A2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human TFA1, 3, 4, or 5 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 447815
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human TFA2/FAM19A2 Ala31-His131 Accession # AAH28403
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

TFA2, also called FAM19A2, is a secreted, 11 kDa member of the FAM19/TFA family of chemokine-like proteins (1). It is synthesized as a 131 amino acid (aa) precursor that contains a 30 aa signal sequence and a 101 aa mature chain. Like other members of the FAM19/TFA family, with the exception of TFA5, mature TFA1 contains 10 regularly spaced cysteine residues that follow the pattern CX₇CCX₁₃CXCX₁₄CX₁₁CX₄CX₅CX₁₀C, where C represents a conserved cysteine residue and X represents any noncysteine amino acid (1). Human TFA2 shares 97% aa sequence identity with mouse TFA2 (1). TFA2 expression can be detected in the central nervous system (CNS), colon, heart, lung, spleen, kidney, and thymus, but its expression in the CNS is 50- to 1000-fold higher than in other tissues (1). Within the CNS, TFA2 expression is highest in the occipital and frontal cortex (3- to 10-fold more abundantly expressed than in other cortical regions) and medulla (1). Hypotheses for the biological functions of TFA family members include modulating immune responses in the CNS by functioning as brain-specific chemokines, acting with other chemokines to optimize the recruitment and activity of immune cells in the CNS (1). Alternately, TFAFs may represent a novel class of neurokines that act as regulators of immune nervous cells (1 - 2). Finally, TFAFs may control axonal sprouting following brain injury (1).

PRODUCT SPECIFIC NOTICES

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