

Human TAFA4/FAM19A4 Alexa Fluor® 700-conjugated Antibody

Monoclonal Mouse IgG₁ Clone # 480103

Catalog Number: IC5099N
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TAFA4/FAM19A4 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human TAFA1, 2, 3, or 5 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 480103
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human TAFA4 Ser35-Arg140 Accession # Q96LR4
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 ⁶ cells	A172 human glioblastoma cell line fixed with paraformaldehyde and permeabilized with saponin

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

TAFA4 (also FAM19A4) is a secreted, 12 kDa member of the FAM19/TAFA family of chemokine-like proteins (1). It is synthesized as a 140 amino acid (aa) precursor that contains a 35 aa signal sequence and a 105 aa mature chain. Like other members of the FAM19/TAFA family, with the exception of TAFA5, mature TAFA1 contains 10 regularly spaced cysteine residues that follow the pattern Cx₇CCx₁₃Cx₁₄Cx₁₁Cx₄Cx₅Cx₁₀C, where C represents a conserved cysteine residue and x represents any noncysteine amino acid (1). Human TAFA4 is 90% aa identical to mouse TAFA4 (1). Real-time PCR analysis indicates that TAFA4 mRNA expression is restricted to the central nervous system (CNS), with the highest level in the thalamus (1). TAFAs 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). TAFAs may represent a novel class of neurokinins that act as regulators of immune nervous cells (1, 2). TAFAs may also control axonal sprouting following brain injury (1).

References:

1. Tang, Y.T. *et al.* (2004) *Genomics* **83**:727.
2. Benveniste, E. (1998) *Cytokine Growth Factor Rev.* **9**:259.

PRODUCT SPECIFIC NOTICES

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