Human TMEM119 Alexa Fluor® 350-conjugated Antibody

Recombinant Monoclonal Rabbit IgG Clone # 2699A
Catalog Number: FAB103131U
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TREM119 in direct ELISAs.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2699A
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Chinese Hamster Ovary cell line CHO derived human TREM119 Arg26-Met96 Accession # Q4V9L6.1
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and 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.*

	Recommended Concentration	Sample
Flow Cytometry	0.25 µg/10^6 cells	HEK293 Human Cell Line Transfected with Human TMEM119 and eGFP

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

TMEM119 (Transmembrane Protein 119, also known as Osteoblast Induction Factor or OBIF), is an approximately 38-kDa type 1 transmembrane protein that is predominantly expressed in osteoblasts and is upregulated during osteoblastic differentiation (1, 2). TMEM119 is also expressed in a cell line of microglia, and TMEM119 immunoreactivity is observed in a specific subset of microglia in brains of neurodegenerative diseases, such as Alzheimer's disease (3). Mature human TMEM119 consists of a 71 amino acid (aa) extracellular domain (ECD), a 21 aa transmembrane segment, and a 166 aa cytoplasmic domain. Within the ECD, human TMEM119 shares 78% and 75% aa sequence identity with mouse and rat TMEM119, respectively. TMEM-119 is involved in the osteoblast differentiation and bone development by acting as a ligand and has been reported to contribute to the proliferation, migration, and invasion of osteosarcoma cells, as well as functioning as an oncogene in osteosarcoma (3, 4).

References:

1. Jiang, Z,H. *et al.* (2017) Expt & Mol Med. **49**:e329.
2. Mizuhashi, K. *et al.* (2012) Dev. Growth Differ. **54**:474.
3. Satoh, J. *et al.* (2016) Neuropathol. **36**:39.
4. Kanamoto, T. *et al.* (2009) BMC Develop. Biol. **9**:70.

PRODUCT SPECIFIC NOTICES

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