

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TMEM59 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 816004
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human TMEM59 Met1-Asn220 Accession # Q9BXS4
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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.

Immunocytochemistry 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

TMEM59 is a 324 aa protein with a 21 amino acid transmembrane domain which localizes to the Golgi compartment where it modulates the O-glycosylation and complex N-glycosylation maturation steps of several proteins including APP, BACE1, SEAP and PRNP. It may retain APP in the Golgi and inhibits amyloid beta generation as well APP cleavage by alpha and beta secretases. TMEM59 also contains a 19 aa peptide that acts as a regulator of autophagy in response to bacterial infection by promoting LC3 activation through interaction with ATG16L1, targeting its own endosomal compartment to lysosomes in response to aggregation during *S. aureus* infection.

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