

DESCRIPTION

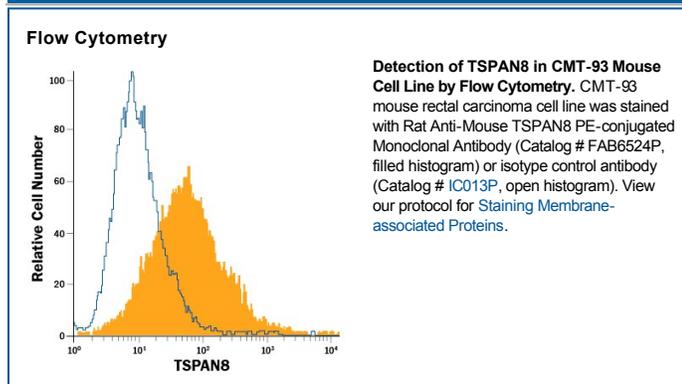
Species Reactivity	Mouse
Specificity	Detects mouse TSPAN8 in direct ELISAs.
Source	Monoclonal Rat IgG _{2B} Clone # 657909
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	CHO Chinese hamster ovary cell line transfected with mouse TSPAN8 Accession # Q8R3G9
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
Formulation	Supplied 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
Flow Cytometry	10 μ L/10 ⁶ cells	See Below

DATA



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. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

TSPAN8 (Tetraspanin-8), also known as TM4SF3 and CO-029, is a 27-33 kDa member of the tetraspanin family of proteins. As evidenced by its name, it is a 4-transmembrane (glyco)protein that is found on/in multiple tumor types as well as smooth and skeletal muscle, endothelium and hematopoietic progenitor cells. All 4-transmembrane proteins are not tetraspanins. Tetraspanins are characterized by the presence of a very short intracellular C- and N-terminus, and a very long extracellular (or LEL) domain linking the 3rd and 4th transmembrane segments. On TSPAN8 this domain is 98 amino acids (aa) in length and represents 42% of the entire length of mouse TSPAN8 (or 235 aa). TSPAN8, like other tetraspanins, forms the backbone of a network that allows molecule interactions on (or in) plasma membranes. This ability is dependent upon molecule palmitoylation and creates a microdomain (or TEM) that is distinct from typical membrane rafts, the latter of which is characterized by the presence of GPI-linked proteins and the molecule caveolin. Within this TEM, TSPAN8 may form homodimers, and is known to interact with multiple molecule types, including CD151, CD81, CD9, CD13, EpCAM, EWI-F, MMP-9, Meprin- β , Rictor, TACE and the integrins α 3(CD49c) β 1, α 6 β 4 and α 4(CD49d) β 1. Such interactions appear to positively or negatively modulate individual molecule activity. These interactions are generally described within the context of exosomes, 30-100 nm membrane-bound vesicles that are released from multiple cell types. TSPAN8-containing exosomes are reported to either facilitate cell motility or act as an antiapoptotic agent for target cells. Over aa 106-203 constituting the LEL, mouse TSPAN8 shares 58% and 73% aa sequence identity with human and rat TSPAN8, respectively.