

DESCRIPTION

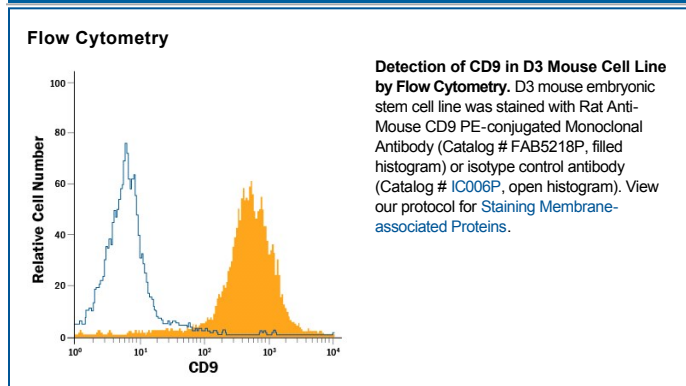
Species Reactivity	Mouse
Specificity	Stains mouse CD9-transfected cells in flow cytometry, but not irrelevant transfectants.
Source	Monoclonal Rat IgG _{2A} Clone # 479608
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with mouse CD9 Pro2-Val226 Accession # P40240
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

CD9 is a 22-25 kDa member of the tetraspanin (TM4SF) superfamily of molecules. Although typology of this family shows a cytoplasmic N- and C-terminus, tetraspanins should not be confused with the MS4A (Membrane-spanning 4 domain) family of proteins. To date, there are more than 30 human tetraspanins, presumably all of which participate in the creation of tetraspanin webs (or multimolecular microdomains) that traverse the cell membrane. As with other superfamily members, CD9 forms homodimers and associates with essentially five classes of molecules: Integrins (α IIb β 3, α 6 β 4, α 3 β 1), IgSF members (ICAM-1, VCAM-1, IgSF8/EWI-2, CD9P1), ectoenzymes (ADAM-12, MT1-MMP) intracellular signaling molecules (PI-4K, PKC) and others (CD81, CD63, IL-16, pro-HBEGF). The microdomain complexes both recruit and regulate individual molecules. CD9-containing microdomains reportedly promote gamete fusion while inhibiting monocyte fusion. Cells known to express CD9 are many and varied, and include oocytes, regulatory B cells (in mouse, not human), endothelial cells, platelets, monocytes, keratinocytes, mast cells, and myoblasts. The extracellular domain(s) of mouse CD9 share 80% and 88% amino acid sequence identity with human and rat CD9, respectively.