

DESCRIPTION

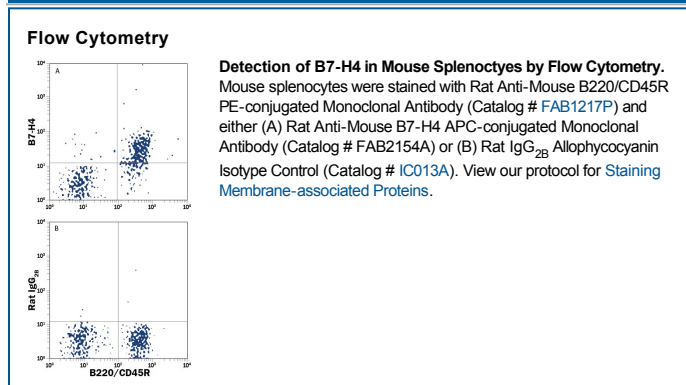
Species Reactivity	Mouse
Specificity	Detects mouse B7-H4 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant mouse (rm) B7-1, rmB7-2, rmB7-H1, rmB7-H2, rmB7-H3, recombinant human (rh) B7-H3b, rhB7-H4, or rmPD-L2 is observed.
Source	Monoclonal Rat IgG _{2B} Clone # 297219
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse B7-H4 Phe29-Pro258 Accession # Q7TSP5
Conjugate	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 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 µL/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.**

- 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

B7-H4, also known as VTCN1, B7x and B7S1, is a 50-60 kDa member of the BTN/MOG family of molecules. In mouse, mature B7-H4 is 232 amino acids (aa) in length, and apparently exists as a GPI-linked molecule. This is in contrast to human B7-H4 which is described as being a type I transmembrane protein that also possesses an NLS. There are two V-type Ig-like domains with multiple glycosylation sites. Over aa 29-258, mouse B7-H4 shares 99% and 90% aa sequence identity with rat and human B7-H4, respectively. Mouse cells known to express B7-H4 include pancreatic islet α- and β-cells, peritoneal macrophages, hepatic stellate cells, dendritic cells and select tumor types. B7-H4 in both mouse and human is known to be solubilized, and to bind to an as-yet unidentified ligand. Although B7-H4 is described as a T cell inactivator, it would appear that it actually fine-tunes an overall downregulation of T cell activity.