

DESCRIPTION

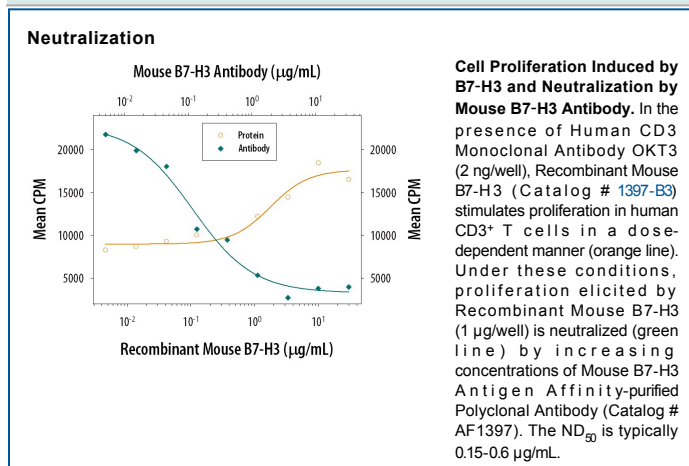
Species Reactivity	Mouse
Specificity	Detects mouse B7-H3 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 50% cross-reactivity with recombinant human (rh) B7-H3 is observed, and less than 1% cross-reactivity with recombinant mouse (rm) B7-H1, rmB7-H2 and rmB7-1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse B7-H3 Val29-Phe244 Accession # Q8VE98
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

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
Western Blot	0.1 µg/mL	Recombinant Mouse B7-H3 (Catalog # 1397-B3)
Neutralization	Measured by its ability to neutralize B7-H3-induced proliferation in human CD3 ⁺ T cells. The Neutralization Dose (ND ₅₀) is typically 0.15-0.6 µg/mL in the presence of 1 µg/well Recombinant Mouse B7-H3 and 2 ng/well Human CD3 Monoclonal Antibody OKT3.	

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month from date of receipt, 2 to 8 °C, reconstituted. 6 months from date of receipt, -20 to -70 °C, reconstituted.

BACKGROUND

T cells require a signal induced by the engagement of the T cell receptor and a “co-stimulatory” signal(s) through distinct T cell surface molecules for optimal T cell expansion and activation. Members of the B7 superfamily of counter-receptors were identified by their ability to interact with co-stimulatory molecules found on the surface of T cells. Members of the B7 superfamily include B7-1 (CD80), B7-2 (CD86), B7-H1 (PD-L1), B7-H2 (B7RP-1), B7-H3, and PD-L2 (1). B7-H3 is expressed at very high levels in immature dendritic cells at moderate levels on mature dendritic cells, LPS stimulated immature dendritic cells and LPS stimulated monocytes, and at low levels on resting monocytes. B7-H3 binds to activated T cells via an as-of-yet identified receptor. B7-H3 co-stimulates proliferation of T cells and interferon-γ (IFN-γ) production and enhances the induction of cytotoxic T cells. B7-H3 shares 20-27% amino acid (aa) identity with other B7 family members (2). Murine B7-H3 is a 259 aa protein containing an extracellular domain, a transmembrane domain and a cytoplasmic domain. Mouse and human B7-H3 share 87% aa identity (3).

References:

1. Coyle, A.J. and J.-C. Gutierrez-Ramos (2001) *Nature Immunol.* **2**:203.
2. Chapoval, A.I. *et al.* (2001) *Nature Immunol.* **2**:269.
3. Sun, M. *et al.* (2002) *J. Immunol.* **168**:6294.