

## **Mouse B7-H2 Antibody**

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF158

Mouse		
Detects mouse B7-H2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 2% cross-reactivity with recombinant human (rh) B7-H2, recombinant mouse (rm) B7-1, rhB7-1, and rmB7-2 is observed.		
Polyclonal Goat IgG		
Antigen Affinity-purified		
Mouse myeloma cell line NS0-derived recombinant mouse B7-H2 Glu47-Lys279 Accession # Q9JHJ8		
Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.		
tions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.		
Recommended Sample Concentration		

Western Blot	0.1 μg/mL	Recombinant Mouse B7-H2 Fc Chimera (Catalog # 158-B7)
Immunocytochemistry	5-15 μg/mL	Immersion fixed RAW 264.7 mouse monocyte/macrophage cell line
PREPARATION AND STORAGE		

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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.  12 months from date of receipt, -20 to -70 °C as supplied.  1 month, 2 to 8 °C under sterile conditions after reconstitution.  6 months, -20 to -70 °C under sterile conditions after reconstitution.		

## BACKGROUND

Mouse B7-H2, also called B7RP-1, B7h, LICOS, and GL50, is a member of the growing B7 family of immune costimulatory proteins. Other family members include B7-1, B7-2, B7-H1 (PD-L1), PD-L2, and B7-H3. B7 proteins are members of the immunoglobulin (Ig) superfamily. The extracellular domains contain 2 Ig-like domains and all members have short cytoplasmic domains. Among the family members, they share about 20-25% amino acid identity. Mouse and human B7-H2 share approximately 49% amino acid identity. B7-H2 has been identified as the ligand for ICOS, a member of the CD28 family of costimulatory receptors. Mouse B7-H2 is a 322 amino acid (aa) protein with a putative 46 aa signal peptide, a 233 aa extracellular domain, a 19 aa transmembrane region, and a 24 aa cytoplasmic domain. Mouse B7-H2 is expressed constitutively on resting B cells and at low levels on monocytes. The B7-H2/ICOS interaction appears to play roles in T cell dependent B cell activation and T<sub>h</sub> differentiation.

## References:

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- 3. Wang, S. et al. (2000) Blood 96:2808.
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- 5. Mages, H.W. et al. (2000) Eur. J. Immunol. **30**:1040.
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- 7. Yoshinaga, S.K. et al. (1999) Nature 402:827.

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