Mouse/Rat TLR7 Antibody

Monoclonal Rat IgG_{2A} Clone # 726606

Catalog Number: MAB7156

DESCRIPTION

Species Reactivity	Mouse/Rat
Specificity	Detects mouse TLR7 in direct ELISAs and mouse and rat TLR7 in Western blots. In direct ELISAs, no cross-reactivity with recombinant human TLR7 or recombinant mouse TLR8 is observed.
Source	Monoclonal Rat IgG_{2A} Clone # 726606
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant mouse TLR7 Asn275-Phe444 Accession # P58681
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

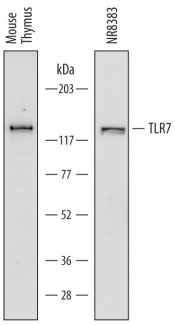
APPLICATIONS

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	1 µg/mL	See Below

DATA

Western Blot



Detection of Mouse and Rat TLR7 by Western Blot. Western blot shows lysates of mouse thymus tissue and NR8383 rat alveolar macrophage cell line. PVDF membrane was probed with 1 µg/mL of Rat Anti-Mouse/Rat TLR7 Monoclonal Antibody (Catalog # MAB7156) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody. A specific band was detected for TLR7 at approximately 130 to 140 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
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

TLR7 (Toll-like receptor 7) is an approximately 130 kDa type I transmembrane glycoprotein and member of the Toll-like receptor family. Mouse TLR7 cDNA encodes 1050 amino acids (aa) including a 26 aa signal sequence and a 811 aa extracellular domain (ECD) with 28 leucine-rich repeats (LRR). Within the region used as an immunogen (LRR 10-16), mouse TLR7 shares 73% and 88% aa identity with human and rat TLR7, respectively. TLR7 mRNA is detected in brain, placenta, spleen, stomach, small intestine, lung, and in plasmacytoid dendritic cells, B cells and eosinophils. TLR7 participates in the innate immune response to microbial agents by recognizing viral and nonviral single stranded RNA.