

DESCRIPTION

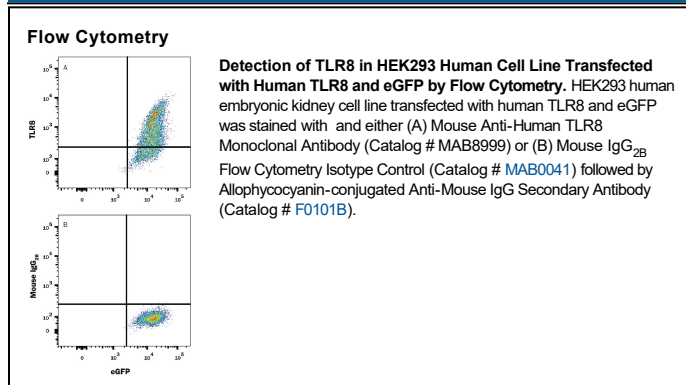
Species Reactivity	Human
Specificity	Detects human TLR8 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 935166
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human TLR8 Glu27-Thr827 Accession # Q9NR97
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 either lyophilized or 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
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
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. <ul style="list-style-type: none"> ● 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

TLR8, also designated as CD288 (cluster of differentiation 288), is a member of the toll-like receptor (TLR) family. TLRs make up a family of pattern recognition receptors that play important roles in the innate immune response. Broad classes of pathogens (e.g. viruses, bacteria, and fungi) constitutively express a set of mutation-resistant molecules called pathogen-associated molecular patterns (PAMPs). These microbial molecular markers may be composed of proteins, carbohydrates, lipids, nucleic acids and/or combinations thereof. Individual TLRs recognize distinct pathogen-associated PAMPs, initiating signaling cascades that promote the immune response. Structurally, TLRs are type I transmembrane receptors that possess varying numbers of extracellular N-terminal leucine-rich repeat (LRR) motifs, followed by a cysteine-rich region, a TM domain, and an intracellular Toll/IL-1 R (TIR) motif. The TIR motif is common to the larger IL-1 R/TLR superfamily. Human TLR8 is an endosomal receptor that recognizes single stranded RNA (ssRNA), and can recognize ssRNA viruses such as Influenza, Sendai, and Coxsackie B viruses. TLR8 binding to the viral RNA recruits MyD88 and leads to activation of the transcription factor NF-κB and an antiviral response.