

DESCRIPTION

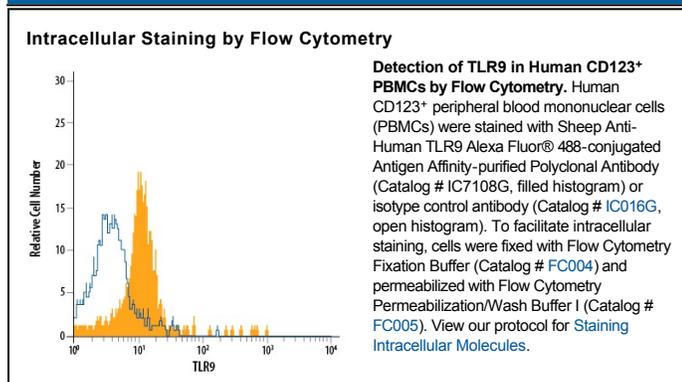
Species Reactivity	Human
Specificity	Detects human TLR9 in direct ELISAs. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse TLR9 is observed, and less than 1% cross-reactivity with recombinant human (rh) TLR1, rhTLR2, rhTLR3, rhTLR4, rhTLR5, rhTLR7, rhTLR8, and rhTLR10 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human TLR9 Asn64-Glu189 Accession # Q9NR96
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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
Intracellular Staining by Flow Cytometry	5 μ L/ 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. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

TLR9 (Toll receptor 9; also CD289) is a 145-150 kDa member of the Toll-like receptor family of molecules. It is expressed by colonic epithelium, CD123⁺ plasmacytoid dendritic cells, and transitional B cells, and responds to unmethylated DNA CpG motifs that exhibit either a GTCGTT sequence (in human), or a GACGTT sequence (in mouse). TLR9 is found in the ER, and translocates to either the cell membrane, or to lysosomes where it binds bacterial DNA. Precursor human TLR9 is a type I transmembrane protein 1032 amino acids (aa) in length. It possesses a 793 aa extracellular region that contains 26 LRRs (aa 26-818), plus a 193 aa cytoplasmic domain. The full-length 150 kDa form is suggested to be ligand-binding but non-signaling. The active form is believed to be an 80 kDa cleavage product found in the endosome compartment. There are multiple splice forms. One contains a deletion of aa 2-16, a second possesses an alternate start site at Met58, while a third and fourth show alternative start sites aa 23 and 24 upstream of the standard site. Over aa 64-189, human TLR9 shares 76% aa identity with mouse TLR9.

References:

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PRODUCT SPECIFIC NOTICES

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