

TLR9

Mouse Anti-Human Toll-like Receptor 9 Clone 5G5 mAb

Catalog No.	MON2093	Quantity:	100 µg
Alternate Names:	CD289		
Description:	<p>Toll-like receptors (TLR) are highly conserved throughout evolution and have been implicated in the innate defence to many pathogens. In <i>Drosophila</i> toll is required for the anti-fungal response, while the related 18-wheeler is involved in antibacterial defences. In mammals, TLR identified as type I transmembrane signalling receptors with pattern recognition capabilities, have been implicated in the innate host defence to pathogens. As investigated so far all functional characterized TLR signal via the TLR/IL-1 receptor (IL-1R) pathway where recruitment of MyD88 seems to be essential. In contrast to cell-wall components, bacterial DNA is probably invisible for immune cells until DNA is liberated during processes taking place in the endosomal/lysosomal compartment where intracellular TLR9 recruits MyD88 to initiate signal transduction. Unmethylated CpG-dinucleotide-containing sequences are found much more frequently in bacterial genomes than in vertebrates genomes, whereas the frequency of CpG dinucleotides are suppressed and usually methylated. The regions adjacent to the CpG dinucleotides also affect the immunostimulatory activity. The optimal sequence differs significantly between mammalian species. Methylated CpG dinucleotides lack immunostimulatory activities. Cellular activation in response to bacterial DNA and synthetic dinucleotides containing unmethylated CpG-dinucleotides is mediated by TLR9.</p>		
Gene ID:	54106		
Host:	Mouse		
Isotype:	IgG2a		
Clone:	5G5		
Formulation:	<p>1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS, containing 0.1% bovine serum albumin and 0.02% sodium azide.</p> <p>Precaution: Sodium azide is a poisonous and hazardous substance which should be handled by trained staff only.</p>		
Cross-Reactivity:	The antibody is cross reactive with mouse TLR9.		
Applications:	<p>The monoclonal antibody can be used for flow cytometry, Western blotting and immunoassays as detection antibody. Furthermore the antibody is useful for immunohistology on frozen and paraffin sections. The monoclonal antibody stains RAW macrophages and TLR9 transfected HEK293 cells.</p>		
Application Notes:	<p>For immunohistology, flow cytometry and Western blotting dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.</p>		
Storage & Stability:	Product should be stored at 4°C. Under recommended storage conditions, product is stable for one year.		

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