

## Product datasheet for **AM26251BT-N**

### CD283 / TLR3 Mouse Monoclonal Antibody [Clone ID: TLR3.7]

#### Product data:

**Product Type:** Primary Antibodies

**Clone Name:** TLR3.7

**Applications:** FN, IF, IHC, IP, WB

**Recommended Dilution:** **Immunohistochemistry on Frozen Sections** (Ref.5,6): Dried sections, fixed with 4% paraformaldehyde and subsequently washed in PBS and MQ. Sections were quenched with 0.3% H<sub>2</sub>O<sub>2</sub> in methanol and washed in PBS. Sections were permeabilized with 0.4% triton-X100 in PBS. Pretreated slides were blocked with 1% horse serum for 20' and incubated o/n with antibody (Ref.5).

**Immunohistochemistry on Paraffin Sections** (Ref.5): Formalin fixed, paraffin embedded sections were deparaffinized with xylene, followed by washes in 95% and 70% EtOH. Sections were washed with water and permeabilized with 0.4% triton-X100 in PBS. Pretreated slides were blocked with 1% horse serum for 20' and incubated o/n with antibody (Ref.5).

**Flow Cytometry** (Ref.1,3,4,5): Cells were incubated with 1 µg antibody together with 10 µg Human IgG for 30' at 4°C in PBS/0.5% BSA (Ref.3). The typical starting working dilution is 1/50.

**Functional Assays** (Ref.1,6): 7.5\*10<sup>4</sup> MRC5 cells were pre-treated with 10-20 µg/ml for 1-24h at 37°C. Monoclonal antibody TLR3.7 inhibits dsRNA-induced IFN-beta production (Ref.1).

**Immunofluorescence** (Ref.3): Cytospins of monocyte-derived iDCs were fixed for 30' with 3% formaldehyde in PBS, permeabilized with PBS/1% BSA/0.5% saponin. After PBS wash slides were incubated for 1h at RT with 20 µg/ml antibody in PBS/1% BSA (Ref.3).

**Immunoprecipitation** (Ref.1,3).

**Western blot** (Ref.6): Total cellular protein was loaded on 7.5% SDS-PAGE and blotted on PDVF. Blots were incubated with 2 µg/ml antibody o/n at 4°C (Ref.6). The typical starting working dilution is 1/50.

**Positive Control:** Monocytes, granulocytes, lymphocytes, human fibroblast, MRC-5 & FS-4 cells.

**Negative Control:** HEK293.

**Reactivity:** Canine, Human, Mouse

**Host:** Mouse

**Isotype:** IgG1

**Clonality:** Monoclonal

**Immunogen:** Human Flag-tagged TLR3 stably expressed by Ba/F3 cells



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<b>Specificity:</b>	The monoclonal antibody TLR3.7 recognizes the 116 kDa Human Toll-like receptor 3 (TLR3, CD283).
<b>Formulation:</b>	PBS Label: Biotin State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% BSA Preservative: 0.02% Sodium Azide
<b>Concentration:</b>	lot specific
<b>Purification:</b>	Protein G Chromatography
<b>Conjugation:</b>	Biotin
<b>Storage:</b>	Store undiluted at 2-8°C.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>Gene Name:</b>	toll like receptor 3
<b>Database Link:</b>	<a href="#">Entrez Gene 7098 Human Q15455</a>
<b>Background:</b>	<p>Toll-like receptors (TLRs) are highly conserved from Drosophila to humans and share structural and functional similarities. TLRs constitute of a family of pattern recognition receptors (PRRs) that mediate cellular responses to a large variety of pathogens (viruses, bacteria, and parasites) by specific recognition of so-called 'pathogen-associated molecular patterns'. Activation of TLRs, a family of at least 11 different members that function either as homo- or heterodimers, leads to activation of NFκB-dependent and IFN-regulatory factor-dependent signaling pathways. TLRs have a central role in innate immunity and are also required for the development of an adaptive immune response. TLRs are expressed by various cells of the immune system, such as macrophages and dendritic cells. TLRs are class I receptors, with a single α-helix that spans the cell membrane. They recognize and respond to molecules derived from bacterial, viral and fungal pathogens, such as lipopolysaccharide (LPS) from the outer membrane of Gram negative bacteria, peptidoglycan fragments from bacterial cell walls and single-stranded and double-stranded RNA from viruses.</p> <p>Some forms of RNA and DNA from pathogens exhibit immutable features that distinguish them from nucleic acids of higher organisms. For example, dsRNA, is a common intermediate of viral replication and a potent indicator of infection. Toll-like receptor 3 (TLR3) recognizes viral double-stranded RNA and its synthetic analog polyriboinosinic:polyribocytidylic acid (poly(I:C)). TLR3 is normally located in acidic endosomes where its luminal ectodomain (ECD) encounters dsRNA and induces type I interferon (IFN), inflammatory cytokine/chemokine production and dendritic cell (DC) maturation via the adaptor protein TICAM-1 (also called TRIF). Based on the different subcellular localization of cytosolic RNA receptors and TLR3, these receptors seem to play distinct roles in anti-viral immune responses.</p>
<b>Synonyms:</b>	Toll-like receptor 3