

PRODUCT DATA SHEET

Product: Anti-TLR3 mAb, clone 40C1285.6

Cat. No.: MC-515 (100 µg)

Background:

The Toll-like receptor (TLR) family in mammals comprises a family of transmembrane proteins characterized by multiple copies of leucine rich repeats in the extracellular domain and IL-1 receptor motif in the cytoplasmic domain. Like its counterparts in *Drosophila*, TLRs signal through adaptor molecules and could constitute an important and unrecognized component of innate immunity in humans. The TLR family is a phylogenetically conserved mediator of innate immunity that is essential for microbial recognition. TLRs characterized so far activate the MyD88/interleukin-1 receptor-associated kinase (IRAK) signaling pathway. Ten human homologs of TLRs (TLR1-10) have been described. TLR3 cDNA codes for a protein, ~120 kDa. TLR3 has a restricted expression pattern being expressed in dendritic cells (DC). TLR3 mRNA expression was detected by in situ hybridization in DC and lymph nodes. The expression of TLR3 in a single cell type may indicate a specific role for this molecule in a restricted setting.

Specificity:

Recognizes human Toll-like Receptor 3 (TLR3).

Species Reactivity:

Human and mouse. Others not tested.

Ig Isotype:

Mouse IgG₁

Immunogen:

Synthetic peptide corresponding to aa 55-70 of human TLR3 (cytoplasmic portion)

Format:

100 µg of liquid Protein G purified monoclonal antibody at 0.5 mg/mL in PBS containing protein stabilizer and 0.05% sodium azide.

Storage:

Store at 4°C short term. Store at -20°C long term. Avoid freeze/thaw cycles.

Applications and Suggested Dilutions:

- Flow cytometry: Use 0.5-4 µg/10⁶ cells for intracellular staining.
- Immunoprecipitation: Use 2 µg/10⁶ transfected cells.
- Western blot: Use at 1-3 µg/mL.
- Immunohistochemistry: (paraffin sections)
- Immunocytochemistry

The optimal dilution for a specific application should be determined by the researcher.

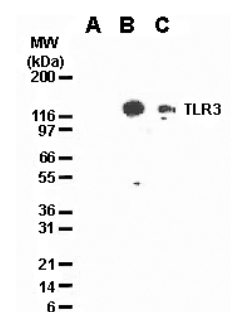


Figure 1: Western blot analysis of TLR3 in lysates from untransfected 293 cells (lane A), 293 cells transfected with human TLR3 cDNA (lane B), and 20 µg/lane human intestine tissue lysate (lane C).

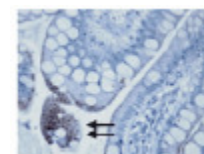


Figure 2: Immunohistochemistry of human gut lumen (longitudinal section, transverse region) using mAb to Toll-like Receptor 3 (human) (40C1285.6) at 10 µg/mL.

Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.