

## Anti-MyD88 (CT)

**CATALOG No.:** 2127

### BACKGROUND:

The pro-inflammatory cytokine IL-1 induced cellular response requires IL-1 receptor complex including IL-1RI and IL-1RAcP. Recently, MyD88 was identified as an adapter molecule in the IL-1 signaling pathway (1). MyD88 associates with and recruits IRAK to the IL-1 receptor complex in response to IL-1 treatment and dominant negative form of MyD88 attenuates IL-1R-mediated NF- $\kappa$ B activation. MyD88 is also employed as a regulator molecule by IL-18 receptor and human Toll receptor (2,3), which are members in the Toll/IL-1R family of receptors. Targeted disruption of the MyD88 gene results in loss of cellular responses to IL-1 and IL-18, and MyD88-deficient mice lack responses to bacterial product LPS that employs Toll-like receptors 2 and 4 (TLR2 and TLR4) as the signaling receptors. MyD88 is a general adapter protein for the Toll/IL-1R family of receptors and plays an important role in the inflammatory response induced by cytokines IL-1 and IL-18 and endotoxin. MyD88 gene is expressed in many tissues.

### SOURCE:

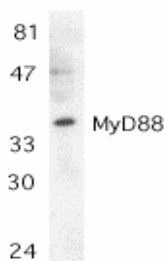
Rabbit anti-MyD88 (CT) polyclonal antibody was raised against a peptide corresponding to amino acids 279 to 296 of human MyD88 (5), which are identical to those of mouse.

### APPLICATION:

This polyclonal antibody can be used for detection of MyD88 by Western blot at 1:500 to 1:1000 dilution. Whole cell lysate from Jurkat cells can be used as positive control and an approximately 35 kDa band can be detected. It is human and mouse reactive. For research use only.

### STORAGE:

It is supplied as immunoaffinity chromatography purified IgG, 100  $\mu$ g in 200  $\mu$ l of PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of MyD88 in Jurkat whole cell lysate with anti-MyD88 (CT) at 1:500 dilution.

### REFERENCES:

1. Muzio M, Ni J, Feng P, Dixit VM. IRAK (Pelle) family member IRAK-2 and MyD88 as proximal mediators of IL-1 signaling. *Science* 1997;278:1612-5
2. Adachi O, Kawai T, Takeda K, Matsumoto M, Tsutsui H, Sakagami M, Nakanishi K, Akira S. Targeted disruption of the MyD88 gene results in loss of IL-1- and IL-18-mediated function. *Immunity* 1998;9:143-50
3. Medzhitov R, Preston-Hurlburt P, Kopp E, Stadlen A, Chen C, Ghosh S, Janeway CA Jr. MyD88 is an adaptor protein in the hToll/IL-1 receptor family signaling pathways. *Mol Cell* 1998;2:253-8
4. Kawai T, Adachi O, Ogawa T, Takeda K, Akira S. Unresponsiveness of MyD88-deficient mice to endotoxin. *Immunity* 1999;11:115-22
5. Bonnert TP, Garza KE, Parnet P, Sonoda G, Testa JR, Sims JE. The cloning and characterization of human MyD88: a member of an IL-1 receptor related family. *FEBS Lett* 1997;402:81-4 (RD1299)