

## TLR Downstream 7x Sampler Kit

**Catalog No.:** APM0001PU-N

**Quantity:** 7 x 25 µg

**Background:** Detection of PAMPs by TLRs represents the immune recognition step that accounts for self-nonsel self discrimination, triggers the innate immune response, and act as efficient molecules for priming and optimizing antigen specific adaptive host response. The TLR gene family and their pathways have been evolutionarily well conserved in both invertebrates and vertebrates. Among the various molecules involved in the successful coordination of the TLR pathway the most important is the adapter protein MyD88 that acts via IRAK1, IRAK2 and TRAF6. Stimulation of MyD88 leads to association with the IL-1R associated kinases, IRAK1, IRAK2 and IRAK4, where IRAK4 is regarded as the central mediator of TLR signaling which acts by activating IRAK1. Activation by these molecules leads to phosphorylation and degradation of IκB leading to the consequent release of NF-κB (p65) and NF-κB (p50). Thus stimulation of TLR by its cognate ligands leads to activation of the NF-κappa-B pathway, cytokine secretion and inflammatory response. TLR4 signaling may require additional molecules like MD-1, important for efficient CD180 cell surface expression and MD-2 to respond to LPS.

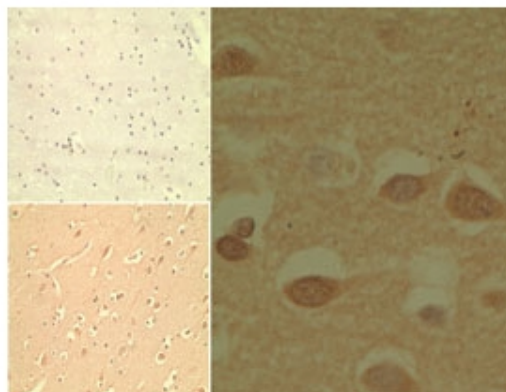
**Format:** **State:** Liquid purified Ig fraction  
**Purification:** Protein G Chromatography.

**Applications:** **Western blot analysis.**  
**Flow Cytometry.**  
**Immunoprecipitation.**  
**Immunohistochemistry on Paraffin Sections.**  
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

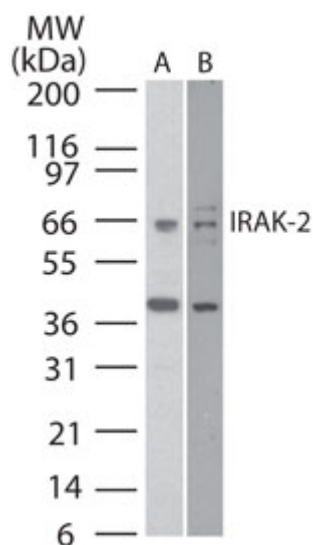
**Add. Information:** TLR Screening Downstream Antibody Sampler Kit contains 7 Polyclonal or Monoclonal Antibodies:  
MyD88 Antibody: SP7130P-25  
NF-κB Antibody: SM7065P-25 (Clone 112A1021)  
MD-1 Antibody: SP7112P-25  
MD-2 Antibody: AP21984PU-25  
IRAK-1 Antibody: SP7100P-25  
IRAK-2 Antibody: AP21933PU-25  
IRAK-4 Antibody: SP7102-25

**Pictures:**

Immunohistochemical analysis of MD-2 in Formalin-Fixed, Paraffin-Embedded Human brain tissue using an Isotype Control (top left) and AP21984PU-N (bottom left, right) at 10 ug/ml.



Western blot analysis of IRAK-2 in A) Human K562 and B) mouse RAW cell lysate using AP21933PU-N at 3 µg/ml.



Western blot analysis of MD-2 in A) Human, B) Mouse, and C) Rat spleen lysate using AP21984PU-N at 2 µg/ml.

