Anti-Phospho-Ser$^{499}$ FMRP (Fragile X Mental Retardation Protein) Antibody

Catalog#: p1125-499  Size: 100 µl

Host  Applications  Species Tested  Species Reactivity*  Molecular Reference
Rabbit  WB  1:1000  M, R  B, C, Ch, H, NHP, S, X, Z  ~71 kDa

Product Description: Affinity purified rabbit polyclonal antibody.

Biological Significance: Fragile X Mental Retardation Protein (FMRP) is an RNA-binding protein that plays an essential role in cognitive brain function. Mutations in the FMR1 gene, which codes for FMRP, can result in fragile X syndrome, autism, as well as other cognitive deficits (Brown et al., 1998, Goodlin-Jones et al., 2004). Phosphorylation of the highly conserved Ser499 has been shown to trigger hierarchical phosphorylation of nearby serines and may play a role in suppressing target mRNA translation (Ceman et al., 2003, Narayanan et al. 2008).

Antigen: Phosphopeptide corresponding to amino acid residues surrounding the phospho-Ser$^{499}$ of rat FMRP.

Antibody Specificity: Specific for endogenous levels of the ~71 kDa FMRP protein phosphorylated at Ser$^{499}$. Immunolabeling is completely eliminated by treatment with λ-Phosphate.

Purification Method: Prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns.

Quality Control Tests: Western blots performed on each lot.

Packaging: 100 µl in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg BSA per ml and 50% glycerol.

Storage and Stability: Shipped on blue ice. Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
**Product Specific References:**


**General References:**


