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Anti-Prion Protein (Ser-43), Phosphospecific Antibody

Catalog # AN1919

Specification

Anti-Prion Protein (Ser-43), Phosphospecific Antibody - Product Information

Primary Accession	P04156
Reactivity	**Bovine**
Host	**Rabbit**
Clonality	**Rabbit Polyclonal**
Isotype	**IgG**
Calculated MW	**27661**

Anti-Prion Protein (Ser-43), Phosphospecific Antibody - Additional Information

Gene ID	**5621**

Other Names
PrP, PrPsc, PrPc

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Anti-Prion Protein (Ser-43), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

Anti-Prion Protein (Ser-43), Phosphospecific Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Prion Protein (Ser-43), Phosphospecific Antibody - Images

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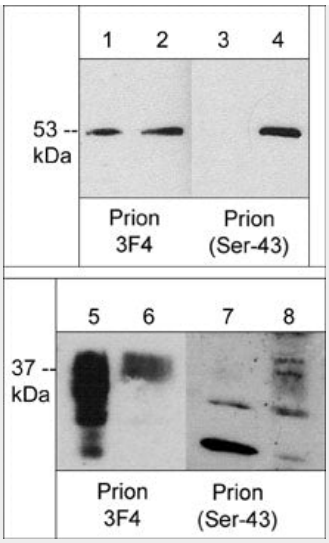

Western blot of GST recombinant human full-length prion protein that was untreated (lanes 1 and 3) or phosphorylated with Cdk5/p25 (lanes 2 & 4). Endogenous prion phosphorylation was examined in human PC3 cells untreated (lanes 5 & 7) or treated with Calyculin A (100 nM) for 30 min (lanes 6 & 8). The blots were probed with anti-Prion protein (3F4) (lanes 1, 2, 5, & 6) or anti-Prion protein (Ser-43) (lanes 3, 4, 7, & 8).

Anti-Prion Protein (Ser-43), Phosphospecific Antibody - Background

Prion related neurodegenerative diseases, called transmissible spongiform encephalopathies, are observed in many animal species. These diseases involve conversion of normal cellular prion protein (PrPc) into a form that is insoluble and resistant to proteases (PrPSc). The protease resistant form can polymerize into fibrils which accumulate in infected tissues and cause cell death and tissue damage. PrPs have an N-terminal signal sequence and a C-terminal linkage to glycosylphosphatidylinositol anchor. The mature protein is a glycosylated protein that associates with cell membranes. Phosphorylation of PrPC at Ser-43 by Cdk5 promotes proteinase K resistance, prion aggregation, and fibril formation in vitro. In addition, Ser-43 phosphorylation is upregulated in scrapie-infected mouse brain relative to controls. Thus, phosphorylation of Ser-43 may be an important mechanism leading conversion of PrPc to PrPSc and the onset of disease.