

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat Cyclophilin B in Western blots. In Western blots, no cross-react with recombinant human Cyclophilin A is observed. Detection of mouse and rat Cyclophilin B has not been tested in Immunocytochemistry.
Source	Monoclonal Mouse IgG _{2A} Clone # 549205
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Cyclophilin B Asp34-Glu216 Accession # P23284
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

Knockout Validated	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Cyclophilin B (SCYLP, CyPB and peptidyl-prolyl *cis-trans* isomerase B) is a 24 kDa glycoprotein member of the B subfamily of the cyclophilin-type PPIase family of molecules. It is both secreted and retained in the ER. When secreted, Cyclophilin B mediates chemotaxis and T cell adhesion to fibronectin. This is likely due to its prolyl *cis/trans* isomerase activity. Intracellularly, Cyclophilin B appears to serve as a molecular chaperone for molecules destined for secretion. It does so via stabilization, and facilitating the activity of additional chaperones. The human Cyclophilin B precursor is 216 amino acids (aa) in length. It contains a 25 aa signal sequence plus a 191 aa mature region. There is a partial heparin-binding sequence (aa 27-34), a PPIase domain (aa 47-204) and a C-terminal ER retention motif (aa 213-216). Over aa 34-216, the human and mouse sequences are 95% aa identical.

PRODUCT SPECIFIC NOTICES

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