

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human Preso/FRMPD4 in direct ELISAs and human and mouse Preso/FRMPD4 in Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 809408
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Preso/FRMPD4 Asn890-Ser1022 Accession # Q14CM0
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

## 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.

	Recommended Concentration	Sample
<b>Western Blot</b>	2 µg/mL	See Below
<b>Simple Western</b>	20 µg/mL	See Below


## DATA

**Western Blot**

**Detection of Human and Mouse Preso/FRMPD4 by Western Blot.** Western blot shows lysates of IMR-32 human neuroblastoma cell line and bEnd.3 mouse endothelioma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human Preso/FRMPD4 Monoclonal Antibody (Catalog # MAB7676) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Preso/FRMPD4 at approximately 140 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

**Simple Western**

**Detection of Mouse Preso/FRMPD4 by Simple Western™.** Simple Western lane view shows lysates of bEnd.3 mouse endothelioma cell line, loaded at 0.5 mg/mL. A specific band was detected for Preso/FRMPD4 at approximately 170 kDa (as indicated) using 20 µg/mL of Mouse Anti-Human/Mouse Preso/FRMPD4 Monoclonal Antibody (Catalog # MAB7676). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Preso, also known as FRMPD4 and PDZD10, is a scaffolding protein that is widely expressed in the brain as 140 kDa and 170 kDa species. It contains one WW domain (aa 33-66) one PDZ domain (aa 78-155), and one FERM domain (aa 204-519). The 140 kDa species is enriched in post-synaptic densities where it interacts with PSD-95, SAP97, SAP102, and F-actin. Preso promotes dendritic spine extension and maintenance as well as excitatory synaptic transmission. Within aa 890-1022, human Preso shares approximately 94% aa sequence identity with mouse and rat Preso.