

**DESCRIPTION**

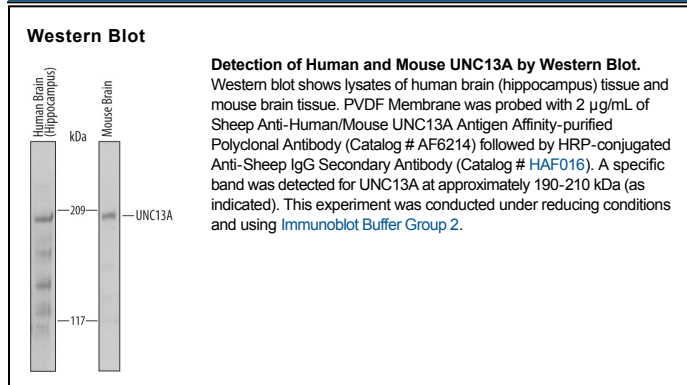
<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human and mouse UNC13A in Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human UNC13A Asp1525-Gly1698 Accession # Q9UPW8
<b>Formulation</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.

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

**DATA**



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<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**

UNC13A (UNCordinated 13A; also Munc13-1) is a 190-210 kDa member of the UNC-13 family, C2 domain protein superfamily of molecules. It is expressed at synaptic junctions, particularly those involved in GABA, acetylcholine and glutamine transmission, and appears to be necessary for neurotransmitter release. In the presynaptic region, UNC13A likely interacts with syntaxin 1, converting it from a closed to an open configuration, thus allowing for SNARE complex formation. Human UNC13A is 1703 amino acids (aa) in length. It contains one C2 domain that mediates dimerization (aa 1-79), a coiled-coil region (aa 320-357), one DAG Zn-finger region (aa 553-603), a second C2 domain (aa 663-769), two MHD domains (aa 1093-1512) and a third C2 domain (aa 1532-1637). Western blots of mouse UNC13A show 105 kDa and 70 kDa forms. Over aa 1525-1698, human UNC13A shares 98% aa identity with mouse UNC13A.