

**DESCRIPTION**

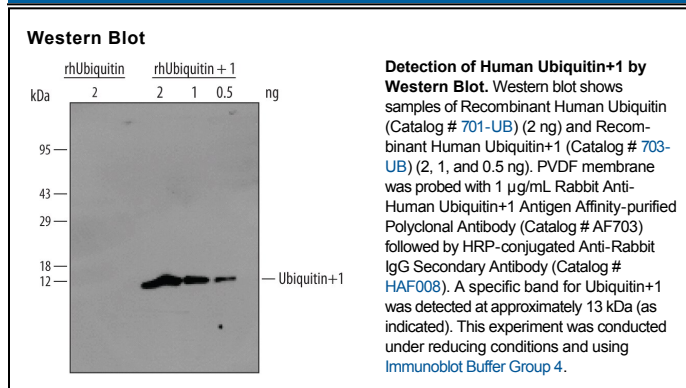
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects recombinant human Ubiquitin+1.
<b>Source</b>	Polyclonal Rabbit IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	KLH-coupled human Ubiquitin+1 synthetic peptide CADLREDPDRQDHPGSGAQ
<b>Formulation</b>	Lyophilized from a 0.2 µm 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>	1 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**

Ubiquitin+1 has a carboxyl terminal amino acid sequence that differs from normal Ubiquitin. The different carboxyl terminal sequence appears to result from a frameshift in the Ubiquitin mRNA. The underlying mechanisms creating the mRNA frameshift are not clearly understood. The occurrence of the frameshift that generates Ubiquitin+1 is much more prevalent in patients with Alzheimers Disease or with Down Syndrome than in control individuals who are not afflicted with the disorders. The monoclonal anti-Ubiquitin+1 (Catalog # MAB703) and rabbit polyclonal anti-Ubiquitin+1 (Catalog # AF703) antibodies were raised against the Ubiquitin+1 carboxyl terminal sequence that differs from normal Ubiquitin and are therefore non-reactive with Ubiquitin. Monoclonal anti-Ubiquitin (Catalog # MAB701) detects both Ubiquitin and Ubiquitin+1 indicating that the epitope recognized by this antibody is contained in the portion of the proteins that are identical (1, 2).

**References:**

1. van Leeuwen, F.W. *et al.* (1998) *Science* **279**:242.
2. van Leeuwen, F.W. *et al.* (1998) *Trends Neurosci.* **21**:331.