

**DESCRIPTION**

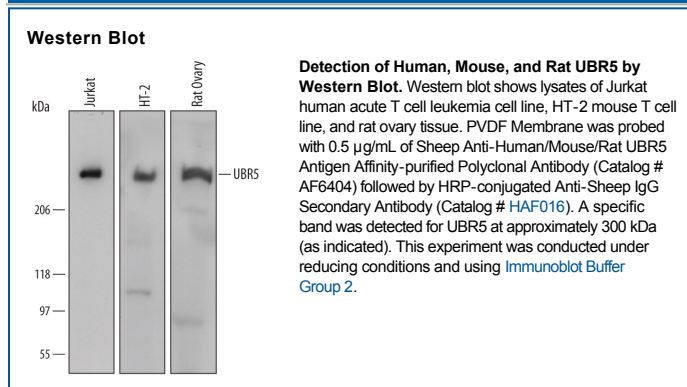
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, and rat UBR5 in Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human UBR5 Met1-Asp227 Accession # O95071
<b>Formulation</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>	0.5 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**

UBR5 (Ubiquitin protein ligase E3 component n-recogin 5; also HYD and EDD) is a 280-300 kDa member of the HECT E3 family of ubiquitin (Ub) protein ligases. It is ubiquitously expressed, and found in both the cytoplasm and nucleus of cells. In addition to ubiquitination, UBR5 is functionally diverse. In the cytoplasm, it interacts with, and stabilizes APC, thereby increasing its concentration. In the nucleus (of smooth muscle cells), it stabilizes myocardin, a transcription factor that activates smooth muscle-specific genes. Perhaps its best known function involves DNA checkpoint activation. Following DNA damage, UBR5 promotes the phosphorylation of CHK2, which arrests the cell cycle at G2/M. Human UBR5 is 2799 amino acids (aa) in length and contains a Ub-associated domain (aa 180-215), two NLS's (aa 502-517 and 630-635), one UBR-type zinc finger region (aa 1177-1244), a PABC region (aa 2377-2454) and a HECT domain with a Ub-binding Cys residue (aa 2462-2799). Over aa 1-227, human UBR5 shares 98% aa identity with mouse UBR5.