

DESCRIPTION

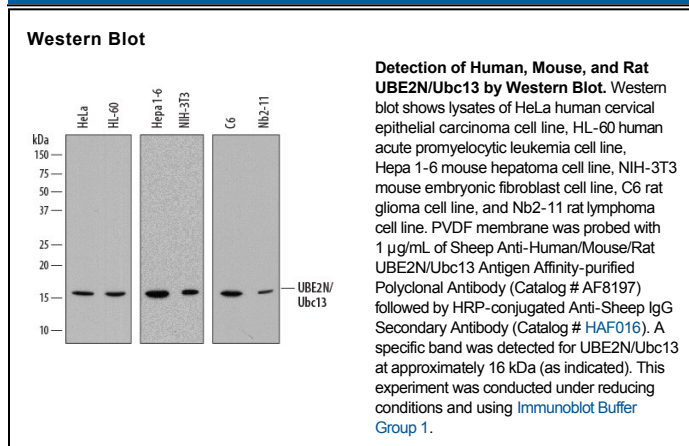
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, rat, and mouse UBE2N/Ubc13 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human UbcH5b is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human UBE2N/Ubc13 Met1-Ile172 Accession # P61088
Formulation	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
Western Blot	1 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Ubiquitin-conjugating Enzyme E2N (UBE2N), also known as Ubiquitin-conjugating Enzyme 13 (Ubc13), is a 16 kDa member of the Ubiquitin-conjugating (E2) enzyme family. UBE2N/Ubc13 has an E2 catalytic core domain with an active site cysteine residue that is required for the formation of a thioester bond with Ubiquitin. UBE2N/Ubc13 localizes to both the nucleus and cytoplasm, and forms heterodimeric complexes with Uev1a/UBE2V1 and Mms2, both of which are catalytically inactive E2 enzyme variants. The UBE2N (Ubc13)/Uev1A complex is found in the cytoplasm and is important for inflammatory responses via Nuclear Factor κ B (NF-κB) activation. In contrast, the UBE2N/Ubc13-Mms2 complex functions in the nucleus and is required for an efficient DNA damage response. Pathologically, UBE2N (Ubc13)/Uev1a complex-mediated NF-κB activation is required for the proliferation of diffuse large B-cell lymphoma cells. Human UBE2N/Ubc13 shares 100% and 99% amino acid sequence identity with its mouse and rat orthologs, respectively.