

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human/Mouse/Rat                                                                                                                                                                                                                                                             |
| <b>Specificity</b>        | 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.                                                                                                    |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human UBE2N/Ubc13<br>Met1-Ile172<br>Accession # P61088                                                                                                                                                                                  |
| <b>Conjugate</b>          | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

#### 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.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

#### 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.

#### PRODUCT SPECIFIC NOTICES

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