

DESCRIPTION

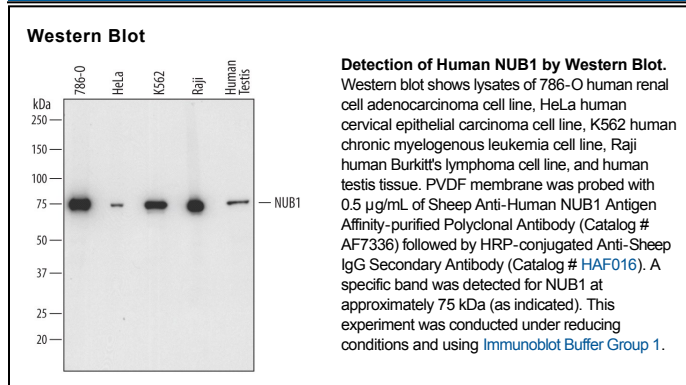
| | |
|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human NUB1 in direct ELISAs and Western blots. |
| Source | Polyclonal Sheep IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | <i>E. coli</i> -derived recombinant human NUB1 Arg513-Asn615 Accession # Q9Y5A7 |
| 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 | 0.5 µg/mL | See Below |

DATA



PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Sterile PBS to a final concentration of 0.2 mg/mL. |
| 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 | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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

NUB1 (NEDD8 Ultimate Buster-1; also NY-REN18) is a 68-74 kDa, TNF- α - and IFN-inducible protein that is found intracellularly in a wide variety of cells. It is reported to be a down-regulator of the NEDD8 conjugation system. NEDD8 is a ubiquitin-like protein that links to cullin family of proteins. Cullin family proteins are associated with large SCF/E3 ligase complexes. In the case of cullin-1, the activities of its SCF-associated complex include the ubiquitination of I κ B α , β -catenin and p21. Ubiquitination does not occur, however, unless cullin-1 is conjugated to NEDD8, making NEDD8 a key regulator of ubiquitination. NUB1 downregulates ubiquitination by binding, and targeting, both free and conjugated NEDD8 to the proteasome. Human NUB1 is 615 amino acids (aa) in length. It contains two coiled-coil regions (aa 36-70 and 152-203) and three UBA domains (aa 374-413, 424-470 and 489-529). There are three potential isoform variants. One possesses an alternative start site 24 aa upstream of the standard site, a second shows a deletion of aa 452-465, and a third shows a combination of the first two variants. Over aa 513-615, human NUB1 shares 84% aa sequence identity with mouse NUB1.