

DESCRIPTION

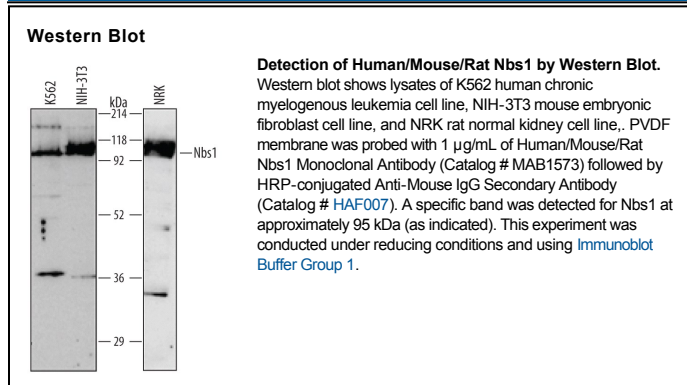
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat Nbs1 in Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 206919
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Nbs1 Pro498-Arg754 Accession # O60934
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
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 0.5 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	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

The Nijmegen Breakage Syndrome 1 (Nbs1) protein is a member of the Mre11/Rad50/Nbs1 (MRN) protein complex that binds to DNA double-strand breaks in cells exposed to DNA damaging agents. In addition, the MRN complex colocalizes with replication forks during DNA replication. The MRN complex plays an important role in routine cell cycle progression and genotoxic stress responses by facilitating DNA repair. In fact, mutation of the *nbs1* gene and resultant loss of Nbs1 protein expression in humans results in the chromosomal instability disease, Nijmegen Breakage Syndrome.