

#### DESCRIPTION

|                                                                                                                                                                                                         |                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human/Mouse/Rat                                                                       |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human, mouse, and rat Nbs1 in Western blots.                                  |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Mouse IgG <sub>2B</sub> Clone # 206919                                     |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                            |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human Nbs1<br>Pro498-Arg754<br>Accession # O60934 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 nm       |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                          |
| *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.

|                           |                                                                        |
|---------------------------|------------------------------------------------------------------------|
| <b>Knockout Validated</b> | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</b>       | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### 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.

#### PRODUCT SPECIFIC NOTICES

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