

DESCRIPTION

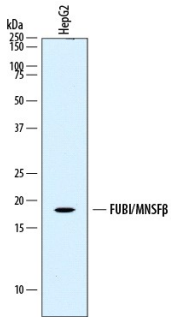
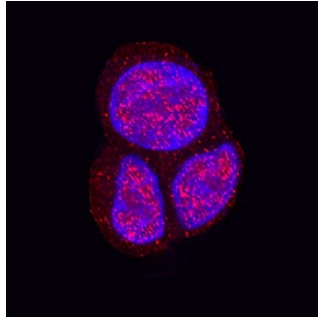
Species Reactivity	Human
Specificity	Detects human FUBI in direct ELISAs.
Source	Monoclonal Rat IgG _{2B} Clone # 861504
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human FUBI/MNSFβ Met1-Gly74 Accession # P35544
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or 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	2 μg/mL	See Below
Immunocytochemistry	8-25 μg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human FUBI/MNSFβ by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line. PVDF membrane was probed with 2 μg/mL of Rat Anti-Human FUBI/MNSFβ Monoclonal Antibody (Catalog # MAB9036) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for FUBI/MNSFβ at approximately 18 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>FUBI/MNSFβ in HEK293 Human Cell Line. FUBI/MNSFβ was detected in immersion fixed HEK293 human embryonic kidney cell line using Rat Anti-Human FUBI/MNSFβ Monoclonal Antibody (Catalog # MAB9036) at 25 μg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to nuclei and cytoplasmic puncta. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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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 ubiquitin-like protein FUBI/ MNSFβ (Monoclonal Nonspecific Suppressor Factor Beta) is encoded by the FAU gene, and is translated as a pro-form consisting of FUBI fused to the ribosomal S30 protein. S30 is cleaved in a post-translational reaction, releasing the mature 74 amino acid FUBI/MNSFβ protein. FUBI has a C-terminal gly-gly motif common to many ubiquitin-like proteins. FUBI/ MNSFβ conjugation to Bcl-G has been shown to regulate the ERK1/2-MAPK cascade in macrophage cell lines, and may be implicated in TLR4-mediated signal transduction. Conjugation to endophilin II regulates dectin-1-mediated phagocytosis and inflammatory responses, and may be implicated in TLR2 signaling pathway.

References:

1. Rossman, T.G. *et al.* (2003) *Oncogene* **22**:1817.
2. Nakamura, M. & Omura, S. (2008) *Biosci. Biotech. Biochem.* **72**:1915.
3. Nakamura, M. & Yamaguchi, S. (2006) *J. Biol. Chem.* **281**:16861.
4. Nakamura, M & Watanabe, N. (2010) *Biochem, Biophys. Res. Comm.* **15**:275.
5. Nakamura, M. *et al.* (2012) *Mol. Cell Biochem.* **364**:39.