Revision 1

#9891 Store at -20C

NBR1 (D2E6) Rabbit mAb

Cell Signaling TECHNOLOGY®

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IF-IC, FC-FP	H M	Endogenous	120	Rabbit IgG	#Q14596	4077

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50
Immunofluorescence (Immunocytochemistry)	1:1600
Flow Cytometry (Fixed/Permeabilized)	1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

Specificity / Sensitivity

NBR1 (D2E6) Rabbit mAb recognizes endogenous levels of total NBR1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Lys601 of human NBR1 protein.

Background

Next to BRCA1 gene 1 (NBR1) protein is known for its encoding gene proximity to the BRCA1 tumor suppressor gene (1,2). N-terminal Phox and Bem1p (PB1) domains of NBR1 mediate its interaction with muscle specific titin kinase (3,4) and scaffolding protein p62 (4). NBR1 plays a role in selective autophagy by facilitating the autophagosomal degradation of ubiquitinated proteins independently and also in concert with p62 (5-11).

Background References

1. Campbell, I.G. et al. (1994) *Hum Mol Genet* 3, 589-94.
2. Miki, Y. et al. (1994) *Science* 266, 66-71.
3. Lange, S. et al. (2005) *Science* 308, 1599-603.
4. Müller, S. et al. (2006) *FEBS Lett* 580, 341-4.
5. Kirkin, V. et al. (2009) *Mol Cell* 33, 505-16.
6. Lamark, T. et al. (2009) *Cell Cycle* 8, 1986-90.
7. Kenific, C.M. and Debnath, J. (2016) *Autophagy* 12, 1958-1959.
8. Hafrén, A. and Hofius, D. (2017) *Autophagy* 13, 2000-2001.
9. Werner, A. et al. (2019) *Autophagy* 15, 78-97.
10. Sánchez-Martín, P. et al. (2020) *EMBO Rep* 21, e48902.
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Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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