Product Datasheet

NBR1 Antibody (6B11) - Azide and BSA Free
H00004077-M01

Unit Size: 0.1 mg

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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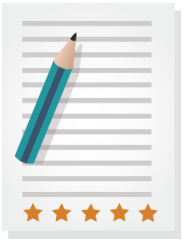
Updated 2/21/2025 v.20.1



H00004077-M01

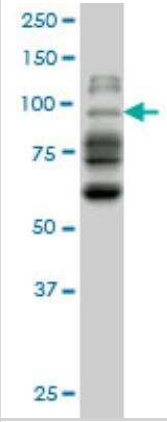
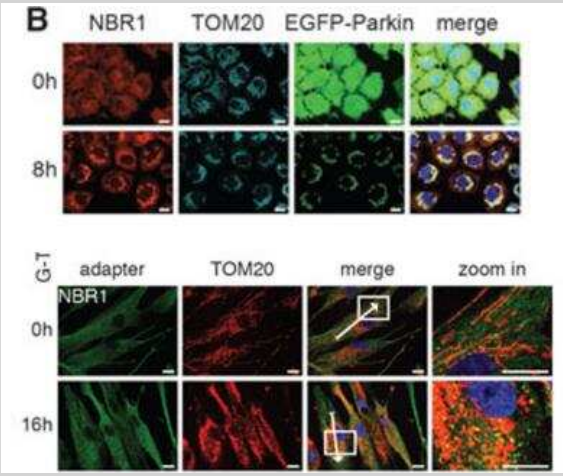
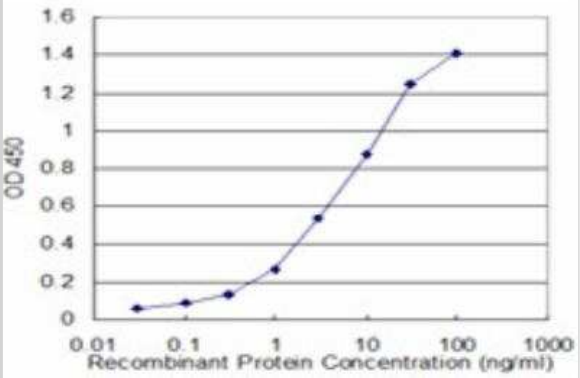
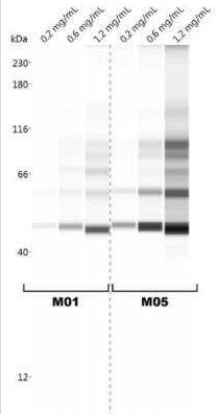
NBR1 Antibody (6B11) - Azide and BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	6B11
Preservative	No Preservative
Isotype	IgG1 Kappa
Purity	IgG purified
Buffer	In 1x PBS, pH 7.4

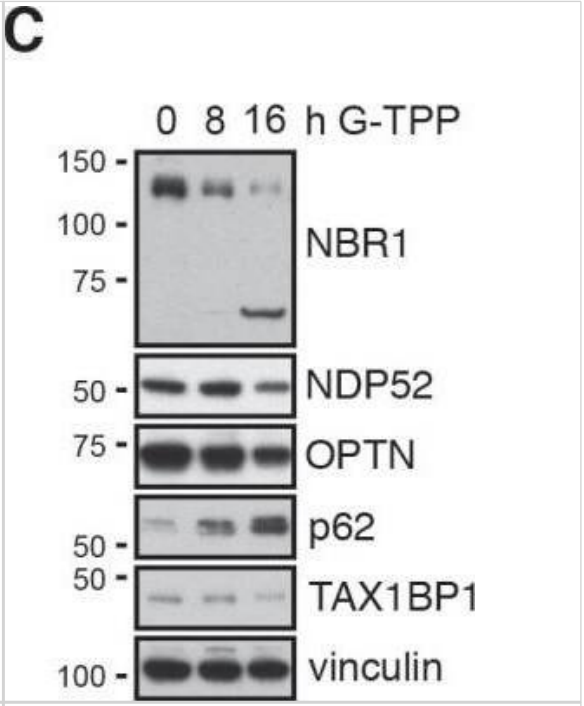
Product Description	
Description	Quality control test: Antibody Reactive Against Recombinant Protein.
Host	Mouse
Gene ID	4077
Gene Symbol	NBR1
Species	Human, Mouse
Reactivity Notes	Mouse reactivity reported in the scientific literature (PMID: 23804102). Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Additional Mouse on Mouse blocking steps may be required for IHC and ICC experiments. Please contact Technical Support for more information.
Specificity/Sensitivity	NBR1 - neighbor of BRCA1 gene 1 (6B11)
Immunogen	NBR1 (NP_005890, 2 a.a. ~ 96 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. EPQVTLNVTFKNEIQSFLVSDPENTTWADIEAMVKVSFDLNTIQIKYLDEENEEV SINSQGEYEEALKMAVKQGNQLQMQVHEGHHVVDEAPPPV
Notes	This product is produced by and distributed for Abnova, a company based in Taiwan.

Product Application Details	
Applications	Western Blot, Simple Western, ELISA, Electron Microscopy, Immunocytochemistry/ Immunofluorescence
Recommended Dilutions	Western Blot 1:500, Simple Western, ELISA, Immunocytochemistry/ Immunofluorescence, Electron Microscopy
Application Notes	Antibody reactivity against cell lysate and recombinant protein for WB. It has also been used for ELISA. Use in Immunocytochemistry/immunofluorescence reported in scientific literature (PMID: 24664425). Use in Electron microscopy reported in scientific literature (PMID: 24664425). This NBR1 Antibody (6B11) is validated for Simple Western from a verified customer review. See Simple Western Antibody Database for Simple Western validation: Tested in THP-1 macrophage lysate 0.2 mg/mL, 0.6 mg/mL and 1.2 mg/mL, separated by Size, antibody dilution of 1:25

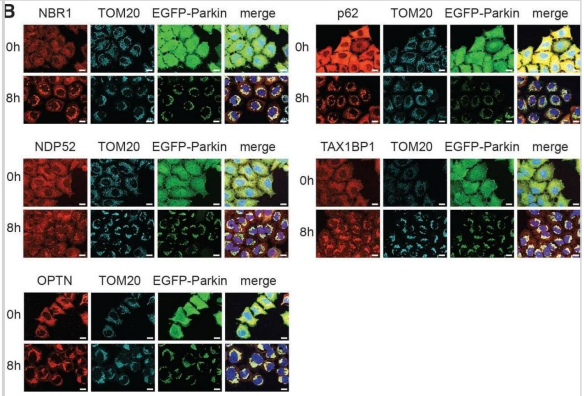
Images

Western Blot: NBR1 Antibody (6B11) [H00004077-M01] - Western Blot analysis of NBR1 expression in PC-12	
Immunocytochemistry/Immunofluorescence: NBR1 Antibody (6B11) [H00004077-M01] - Top panel: HeLa cells stably expressing EGFP-Parkin were treated with 10 uM G-TPP and fixed 8 h after treatment. Cells were stained with antibodies against the autophagy adapter protein NBR1 (red), mitochondria were counterstained with TOM20 antibodies (cyan), nuclei with Hoechst (blue). EGFP-Parkin epifluorescence is shown in green. Scale bar corresponds to 10 uM. Bottom panel: Human fibroblasts were treated with 15 uM G-TPP for 16 h and fixed and stained with antibodies against the autophagy adapter NBR (green), mitochondria were stained with antibodies against TOM20 (red), nuclei were visualized with Hoechst (blue). Scale bars indicate 10 uM. Image collected and cropped by CiteAb from the following publication (https://www.oncotarget.com/lookup/doi/10.18632/oncotarget.22287) licensed under a CC-BY license.	
ELISA: NBR1 Antibody (6B11) [H00004077-M01] - Detection limit for recombinant GST tagged NBR1 is approximately 0.1 ng/mL as a capture antibody.	
Simple Western: NBR1 Antibody (6B11) [H00004077-M01] - This antibody (1:25 dilution) was used to probe THP-1 macrophage lysate (concentrations shown) by Simple Western. Results from two hybridoma clones are shown. Simple Western image submitted by a verified customer review.	

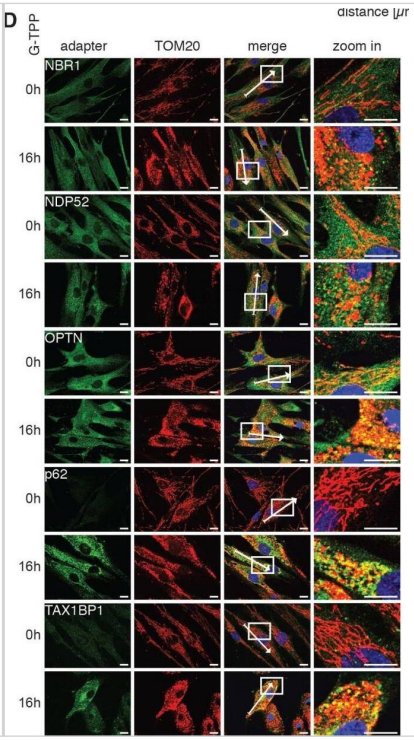
Western Blot: NBR1 Antibody (6B11) [H00004077-M01] - G-TPP activity is conserved in primary fibroblasts(A, C) Fibroblasts were treated with 15 µM G-TPP for the indicated time points. Cells were harvested & western blots were probed with antibodies against (A) PINK1, pS65-Ub & total Ub or (C) autophagy adapter proteins. GAPDH & Vinculin served as loading control. G-TPP treatment led to PINK1 stabilization & pS65-Ub induction in primary skin fibroblasts. p62 levels were induced upon G-TPP treatment, while other adapters seemed decreased. (B, D) Human fibroblasts were treated with 15 µM G-TPP for 16 h & fixed & stained with antibodies against (B) pS65-Ub (green) or (D) the autophagy adapters NBR1, NDP52, p62, OPTN & TAX1BP1 (green). Mitochondria were stained with antibodies against TOM20 (red), nuclei were visualized with Hoechst (blue). Scale bars indicate 10 µM. A magnified image of the boxed region, the fluorescence profile along the arrow & the Pearson's correlation coefficient of adapter protein & mitochondrial stainingare shown to the right. Shown is the mean ± SEM of at least five randomly selected images (unpaired, two-sided t-test, ***p < 0.0005). Image collected & cropped by CiteAb from the following publication (https://www.oncotarget.com/lookup/doi/10.18632/oncotarget.22287), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Immunocytochemistry/ Immunofluorescence: NBR1 Antibody (6B11) [H00004077-M01] - G-TPP leads to recruitment of autophagy adapters & degradation of mitochondria(A) HeLa cells stably expressing untagged Parkin were treated with 10 µM G-TPP for 8 h. Western blots were prepared from cell lysates & probed with antibodies against LC3, phospho-TBK1 (Ser172) & TBK1. GAPDH was used as a loading control. Upon 8 h the levels of LC3-I & LC3-II were both increased. At 8 h after treatment with G-TPP but not at 4 or 24 h, TBK1 was phosphorylated. (B) HeLa cells stably expressing EGFP-Parkin were treated with 10 µM G-TPP & fixed 8 h after treatment. Cells were stained with antibodies against the autophagy adapter proteins NBR1, NDP52, OPTN, p62, & TAX1BP1 (red). Mitochondria were counterstained with TOM20 antibodies (cyan), nuclei with Hoechst (blue). EGFP-Parkin epifluorescence is shown in green. Scale bar corresponds to 10 µM. (C) HeLa cells stably expressing EGFP-Parkin & the reporter protein mitoKeima were treated with 10 µM CCCP or G-TPP & imaged over time. The ratio of 'neutral' mitoKeima to 'acidic' mitoKeima was calculated as readout for mitophagy. Parkin translocation was monitored at the same time. Values for Parkin translocation & mitophagy were normalized to 12 h treatment with 10 µM CCCP as positive control & DMSO as negative control (two-way ANOVA with Tukey's post-hoc test, **p < 0.005, ***p < 0.0005). Image collected & cropped by CiteAb from the following publication (https://www.oncotarget.com/lookup/doi/10.18632/oncotarget.22287), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Immunocytochemistry/ Immunofluorescence: NBR1 Antibody (6B11) [H00004077-M01] - G-TPP activity is conserved in primary fibroblasts(A, C) Fibroblasts were treated with 15 µM G-TPP for the indicated time points. Cells were harvested & western blots were probed with antibodies against (A) PINK1, pS65-Ub & total Ub or (C) autophagy adapter proteins. GAPDH & Vinculin served as loading control. G-TPP treatment led to PINK1 stabilization & pS65-Ub induction in primary skin fibroblasts. p62 levels were induced upon G-TPP treatment, while other adapters seemed decreased. (B, D) Human fibroblasts were treated with 15 µM G-TPP for 16 h & fixed & stained with antibodies against (B) pS65 -Ub (green) or (D) the autophagy adapters NBR1, NDP52, p62, OPTN & TAX1BP1 (green). Mitochondria were stained with antibodies against TOM20 (red), nuclei were visualized with Hoechst (blue). Scale bars indicate 10 µM. A magnified image of the boxed region, the fluorescence profile along the arrow & the Pearson's correlation coefficient of adapter protein & mitochondrial stainingare shown to the right. Shown is the mean ± SEM of at least five randomly selected images (unpaired, two-sided t-test, ***p < 0.0005). Image collected & cropped by CiteAb from the following publication (https://www.oncotarget.com/lookup/doi/10.18632/oncotarget.22287), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Greiner GF, Conraux C, Collard M, Picart P. [Value of pendular rotational methods in the study of vestibular reequilibration]. Rev Otoneuroophtalmol 2018-01-01 [PMID: 29290944]

Calcagni' A, Staiano L, Zampelli N et al. Loss of the batten disease protein CLN3 leads to mis-trafficking of M6PR and defective autophagic-lysosomal reformation Nature communications 2023-07-03 [PMID: 37400440] (WB)

Monaco A, Maffia V, Sorrentino N et al. The Amyloid Inhibitor CLR01 Relieves Autophagy and Ameliorates Neuropathology in a Severe Lysosomal Storage Disease. Mol Ther. 2020-02-12 [PMID: 32087148]

E Turco, A Savova, F Gere, L Ferrari, J Romanov, M Schuschnig, S Martens Reconstitution defines the roles of p62, NBR1 and TAX1BP1 in ubiquitin condensate formation and autophagy initiation Nature Communications, 2021-09-01;12(1):5212. 2021-09-01 [PMID: 34471133]

Chong T, Hao-Chun C, Qiling Z et al. MOAP-1-mediated dissociation of p62/SQSTM1 bodies releases Keap1 and suppresses Nrf2 signaling. EMBO Rep. 2021-01-04 [PMID: 33393215]

Chang HC, Tao RN, Tan CT et al. The BAX-binding protein MOAP1 associates with LC3 and promotes closure of the phagophore Autophagy 2021-03-30 [PMID: 33783314]

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Deosaran E, Larsen KB, Hua R et al. NBR1 acts as an autophagy receptor for peroxisomes. J Cell Sci. 2012-12-13 [PMID: 23239026]

Rue L, Lopez-Soop G, Gelpi E et al. Brain region- and age-dependent dysregulation of p62 and NBR1 in a mouse model of Huntington's disease. Neurobiol Dis. 2013-01-04 [PMID: 23295856]

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NBP2-58516PEP	NBR1 Recombinant Protein Antigen

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