# Product Datasheet

## Staufen Antibody - BSA Free
## NBP1-33202

Unit Size: 0.1 ml

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

www.novusbio.com technical@novusbio.com

**Publications: 6**

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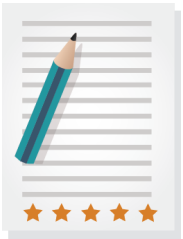
Updated 2/21/2025 v.20.1





# NBP1-33202

Staufen Antibody - BSA Free

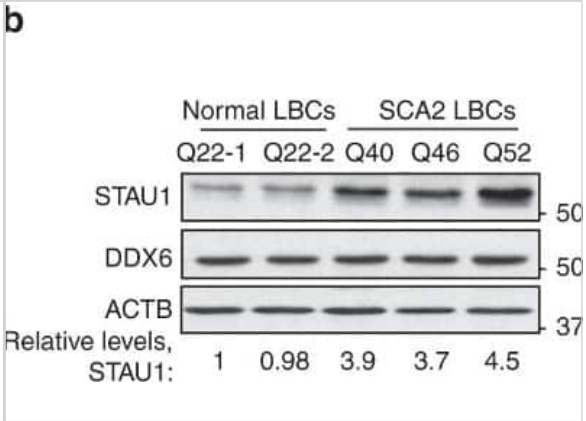
| Product Information | |
|---|---|
| **Unit Size** | 0.1 ml |
| **Concentration** | Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services. |
| **Storage** | Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles. |
| **Clonality** | Polyclonal |
| **Preservative** | 0.025% Proclin 300 |
| **Isotype** | IgG |
| **Purity** | Antigen Affinity-purified |
| **Buffer** | PBS, 20% Glycerol |
| **Target Molecular Weight** | 63 kDa |

| Product Description | |
|---|---|
| **Host** | Rabbit |
| **Gene ID** | 6780 |
| **Gene Symbol** | STAU1 |
| **Species** | Human, Mouse |
| **Reactivity Notes** | Zebrafish (81%), Xenopus laevis (86%). |
| **Immunogen** | Recombinant protein encompassing a sequence within the C-terminus region of human Staufen. The exact sequence is proprietary. |

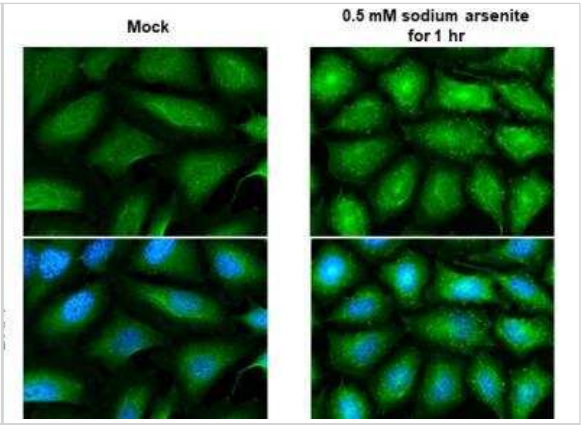
| Product Application Details | |
|---|---|
| **Applications** | Western Blot, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation |
| **Recommended Dilutions** | Western Blot 1:500-1:3000, Immunocytochemistry/ Immunofluorescence 1:100-1:1000, Immunoprecipitation 1:500-1:3000 |

## Images

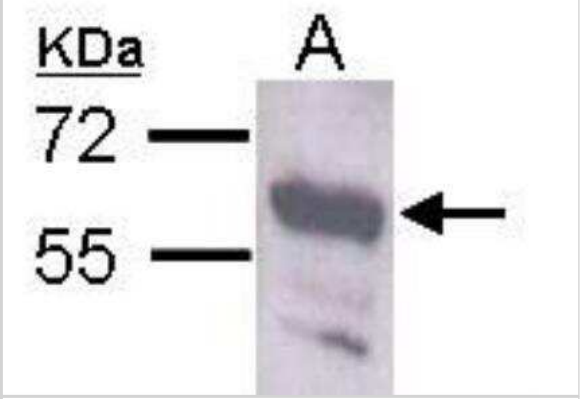
Western Blot: Staufen Antibody [NBP1-33202] - Western blot analysis of LBCs show increased Staufen (STAU1) (NBP1-33202) levels compared with normal controls. DDX6 (NB200-191) levels are unchanged. HD and SCA3 patient (polyQ expanded) FBs were used as additional controls. Four normal and five SCA2 FBs, and two normal and three SCA2 LBCs were used.Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/30194296/) licensed under a CC-BY license.



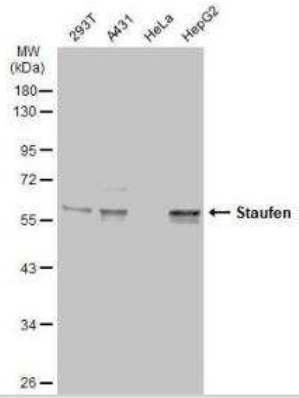
Immunocytochemistry/Immunofluorescence: Staufen Antibody [NBP1-33202] - Mock and treated HeLa cells were fixed in 4% paraformaldehyde at RT for 15 min. Green: Staufen stained by Staufen antibody diluted at 1:500. Blue: Fluoroshield with DAPI.



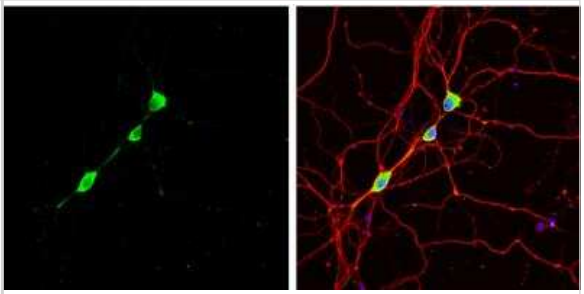

Western Blot: Staufen Antibody [NBP1-33202] - Sample (30 ug of whole cell lysate) A: Neuro2A diluted at 1:1000

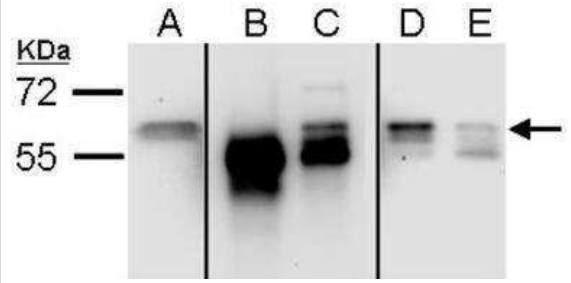
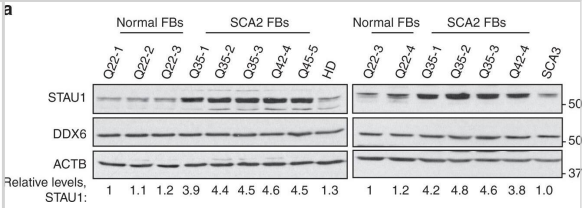



Western Blot: Staufen Antibody [NBP1-33202] - Various whole cell extracts (30 ug) were separated by 10% SDS-PAGE, and the membrane was blotted with Staufen antibody diluted at 1:5000. The HRP-conjugated anti-rabbit IgG antibody (NBP2-19301) was used to detect the primary antibody.

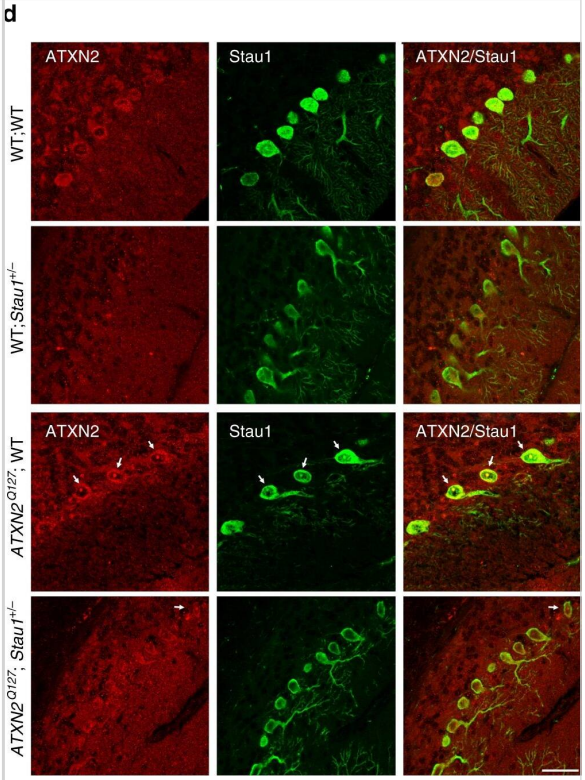



Immunocytochemistry/Immunofluorescence: Staufen Antibody [NBP1-33202] - DIV9 rat E18 primary hippocampal neuron cells were fixed in 4% paraformaldehyde at RT for 15 min. Green: Staufen stained by Staufen antibody diluted at 1:500. Red: beta Tubulin 3/ Tuj1, stained by beta Tubulin 3/ Tuj1 antibody [11710] diluted at 1:500. Blue: Fluoroshield with DAPI.



| | |
|---|---|
| Immunoprecipitation: Staufen Antibody [NBP1-33202] - Staufen antibody staining 30 ug whole cell lysate of Lane A: 293 (input), Lane B: control rabbit IgG-IP, Lane C: Stau1-IP, Lane D: Post-IP lysate from control rabbit IgG-IP, Lane E:Post-IP lysate from Stau1-IP; diluted at 1:3000. |  |
| Staufen1 protein but not mRNA steady-state levels are increased in neurodegenerative disease cells & tissues. Western blot analysis of SCA2- FBs (a) & LBCs (b) show increased STAU1 levels compared with normal controls. DDX6 levels are unchanged. HD & SCA3 patient (polyQ expanded) FBs were used as additional controls. Four normal & five SCA2 FBs, & two normal & three SCA2 LBCs were used. c, d Western blot analyses of ATXN2Q127 (c) & BAC-Q72 (d) mouse cerebellar extracts (24 weeks of age) showing increased Stau1 levels compared with wild-type or BAC-Q22 controls (n = 2–3 animals per group). e Western blot of FB extracts from an ALS patient with the TDP-43G298S mutation show increased STAU1 levels. β-Actin was used as loading control & representative blots of three independent experiments are shown. f–hSTAU1 RNA levels are unaltered in SCA2 & ALS cells & SCA2 mice. qRT-PCR analyses of STAU1 mRNA in SCA2 FBs & ALS FB with TDP-43G298S mutation (f) or SCA2 LBCs (g). h qRT-PCR analyses of cerebellar RNAs from ATXN2Q127 & BAC-Q72 mice compared to wild-type littermates (24 weeks of age; n = animals per group). Gene expression levels were normalized to Actb Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/30194296), licensed under a CC-BY license. Not internally tested by Novus Biologicals. |  |

Western Blot: Staufen Antibody [NBP1-33202] - Silencing of STAU1 mitigates SCA2 phenotypes. aStau1 haploinsufficiency improves abnormal motor behavior of ATXN2Q127 mice as determined by rotarod behavior at 8, 12, 16, & 20 weeks of age. ATXN2Q127;Stau1+/- mice (green) have improved rotarod performance compared with ATXN2Q127 littermates (red) starting at 12 weeks of age. Note that Stau1 haploinsufficiency (orange) by itself does not alter motor function; n = 9–15 mice per group. Values shown are mean ± SE. Significance was determined using generalized estimating equations (GEE). NS, nonsignificant, *P < 0.05, **P < 0.01. b, c Reduction of Stau1 in vivo improves levels of key cerebellar proteins towards normalization. b Western blotting of cerebellar extracts from ATXN2Q127;Stau1+/- mice showing improvement of protein levels for Calb1, Pcp2, Rgs8, Pcp4, Homer3, & Fam107b towards normalization. Each lane represents cerebellar extract from an individual mouse. β-Actin is used as a loading control & the blots are from three replicate experiments. c Quantitative analysis of western blots shown in b. Data are mean ± SD, **P < 0.01, ***P < 0.001, Student t-test. d Combined immunostaining of ATXN2 (red) & Stau1 (green) of cerebellar sections from ATXN2Q127 & crossed ATXN2Q127;Stau1+/- mice (34 weeks of age) demonstrating reduced ATXN2-Stau1 aggregates in crossed ATXN2Q127;Stau1+/- mice. Scale bar, 30 μM. e Model for STAU1 in the pathology of SCA2 & other neurodegenerative diseases Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/30194296), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

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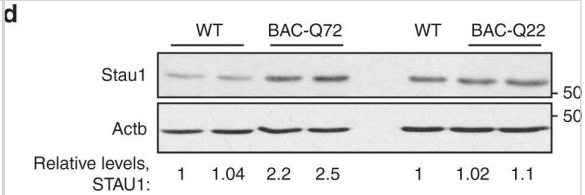

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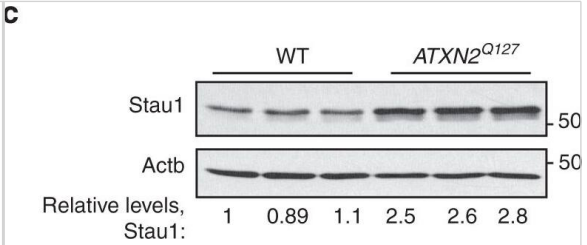


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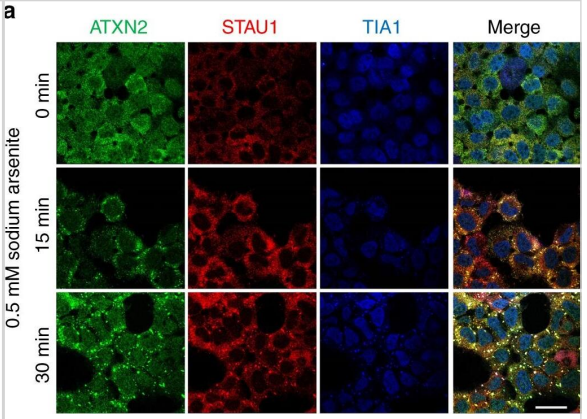

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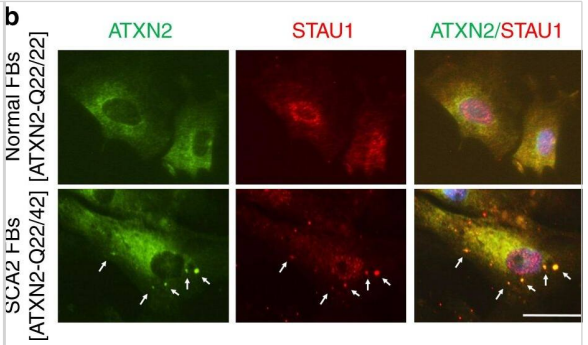


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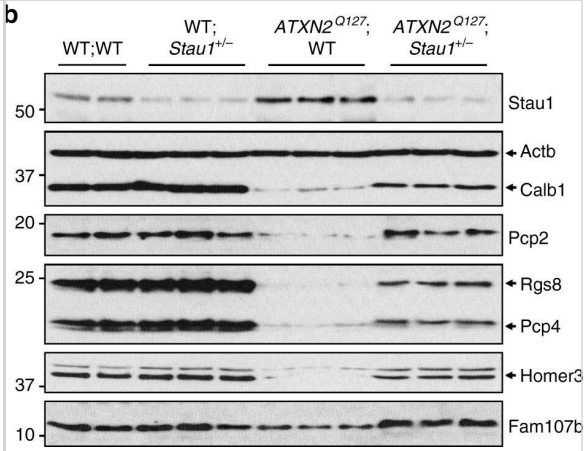

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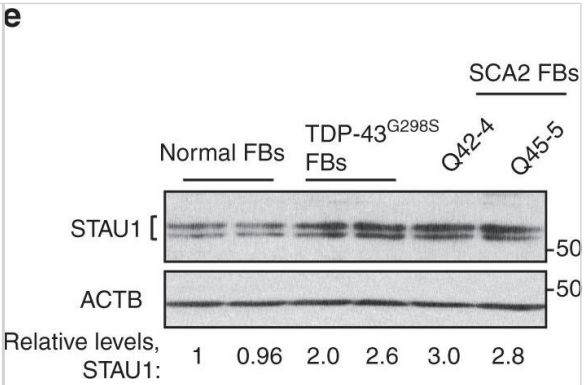


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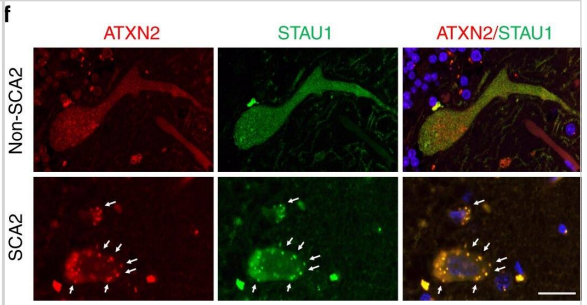

## Publications


Paul S, Dansithong W, Gandelman M et al. Staufen Impairs Autophagy in Neurodegeneration Annals of Neurology 2023-02-01 [PMID: 36151701] (Western Blot, In vivo assay, Block/Neutralize)

Gandelman M, Dansithong W, Kales SC et al. The AKT modulator A-443654 reduces ?-synuclein expression and normalizes ER stress and autophagy Journal of Biological Chemistry 2021-10-01 [PMID: 34520759] (Western Blot)

Corbet GA, Burke JM, Bublitz GR, Parker R dsRNA-induced condensation of antiviral proteins promotes PKR activation J Biol Chem 2020-01-04 [PMID: 31896577]

Scoles DR, Gandelman M, Paul S et al. A quantitative high throughput screen identifies compounds that lower expression of the SCA2- and ALS-associated gene ATXN2 The Journal of biological chemistry 2022-07-01 [PMID: 35787375]

Paul S, Dansithong W, Figueroa KP et al. Staufen1 in human neurodegeneration Annals of neurology 2021-03-21 [PMID: 33745139]

Paul S, Dansithong W, Figueroa KP et al. Staufen1 links RNA stress granules and autophagy in a model of neurodegeneration. Nat Commun 2018-09-07 [PMID: 30194296] (WB, Human)

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Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

## Products Related to NBP1-33202

| | |
|---|---|
| HAF008 | Goat anti-Rabbit IgG Secondary Antibody [HRP] |
| NB7160 | Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP] |
| NBP2-24891 | Rabbit IgG Isotype Control |
| NBP2-38615PEP | Staufen Recombinant Protein Antigen |

**Limitations**
This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

**For more information on our 100% guarantee, please visit www.novusbio.com/guarantee**

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