

# Product Datasheet

## CAMSAP1L1 Antibody NBP1-21402

Unit Size: 0.1 ml

Store at 4C. Do not freeze.

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Updated 9/9/2025 v.20.1

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**NBP1-21402****CAMSAP1L1 Antibody**

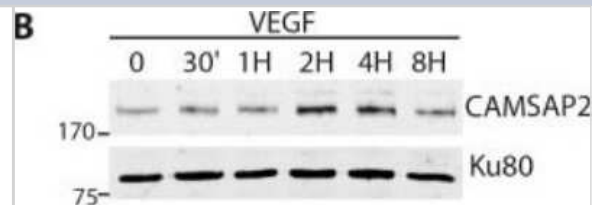
| Product Information |                             |
|---------------------|-----------------------------|
| Unit Size           | 0.1 ml                      |
| Concentration       | 0.2 mg/ml                   |
| Storage             | Store at 4C. Do not freeze. |
| Clonality           | Polyclonal                  |
| Preservative        | 0.09% Sodium Azide          |
| Isotype             | IgG                         |
| Purity              | Immunogen affinity purified |
| Buffer              | TBS and 0.1% BSA            |

| Product Description |                                                                                                                                                                                                                                                  |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description         | Novus Biologicals Rabbit CAMSAP1L1 Antibody (NBP1-21402) is a polyclonal antibody validated for use in WB, ICC/IF and IP. Anti-CAMSAP1L1 Antibody: Cited in 11 publications. All Novus Biologicals antibodies are covered by our 100% guarantee. |
| Host                | Rabbit                                                                                                                                                                                                                                           |
| Gene ID             | 23271                                                                                                                                                                                                                                            |
| Gene Symbol         | CAMSAP2                                                                                                                                                                                                                                          |
| Species             | Human, Rat                                                                                                                                                                                                                                       |
| Reactivity Notes    | Rat reactivity reported in scientific literature (PMID: 24440982)                                                                                                                                                                                |
| Immunogen           | The immunogen recognized by this antibody maps to a region between residue 1439 and 1489 of human calmodulin regulated spectrin-associated protein 1-like 1 using the numbering given in entry EAW91320.1 (GeneID 23271).                        |

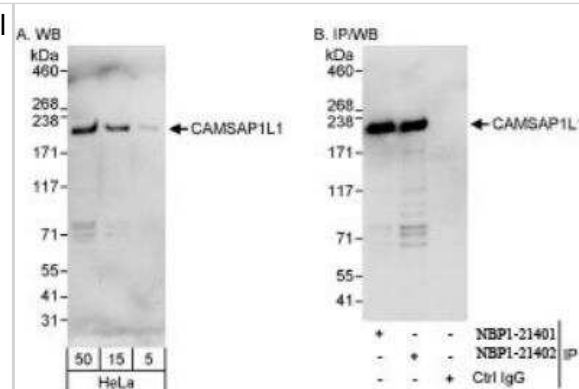
| Product Application Details |                                                                                                                                                                                   |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Applications                | Western Blot, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation, Knockdown Validated                                                                                   |
| Recommended Dilutions       | Western Blot 1:2000-1:10000, Immunocytochemistry/ Immunofluorescence Reported in scientific literature (PMID 24440982), Immunoprecipitation 2-5 ug/mg lysate, Knockdown Validated |

**Images**

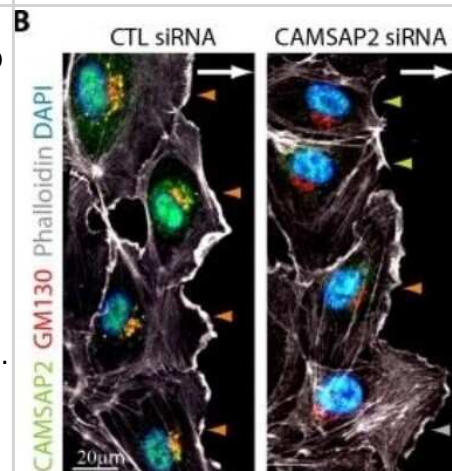
Western Blot: CAMSAP1L1 Antibody [NBP1-21402] - CAMSAP1L1 is required for maintaining non-centrosomal MTs and EC migration. Western blots of total extracts of HUVECs during a VEGF stimulation experiment using antibodies against CAMSAP1L1 and Ku80 as loading control. Image collected and cropped by CiteAb from the following publication (<https://elifesciences.org/articles/33864>), licensed under a CC-BY license.



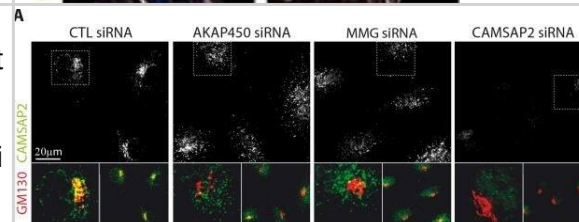
**Western Blot: CAMSAP1L1 Antibody [NBP1-21402] - on HeLa whole cell lysate using anti-CAMSAP1L1 antibody. CAMSAP1L1 was also immunoprecipitated by rabbit anti-CAMSAP1L1 antibody NBP1-21401.**



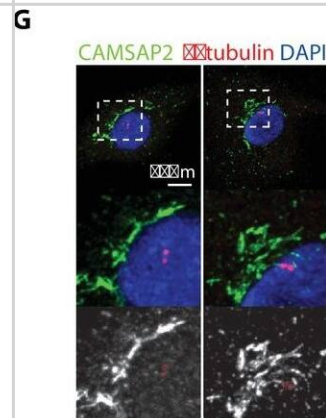
**Immunocytochemistry/ Immunofluorescence: CAMSAP1L1 Antibody [NBP1-21402] - CAMSAP1L1 participates in Golgi polarization during 2D migration and 3D sprouting. Rab6 vesicle tracks in HUVECs transfected with control or CAMSAP1L1 siRNA. Fluorescence time-lapse TIRF images of GFP-Rab6A at the front cell row in a wound healing assay were tracked automatically. Maximum intensity projections of the acquired signal (black, top) and tracks resulting from automatic processing (multicolor, bottom) are shown. The front of the cell was defined according to the front-rear cell morphology (the orange area in the scheme and the dashed orange line in the bottom images), and the proportion of tracks in this area was quantified, n = 12 cells per condition. Image collected and cropped by CiteAb from the following publication (<https://elifesciences.org/articles/33864>), licensed under a CC-BY license.**



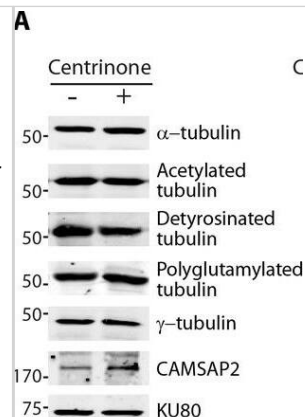
**Immunocytochemistry/ Immunofluorescence: CAMSAP1L1 Antibody [NBP1-21402] - Loss of non-centrosomal MTs has a more severe impact than their detachment from the Golgi in 3D but not in 2D. (A) Staining for CAMSAP2 (white, green) & Golgi (GM130, red) in HUVECs transfected with indicated siRNA. The plot shows CAMSAP2 enrichment at the Golgi (ratio between the average CAMSAP2 intensity on top of Golgi & in cytoplasm), n = 20 cells per condition. Image collected & cropped by CiteAb from the following publication (<https://elifesciences.org/articles/33864>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.**



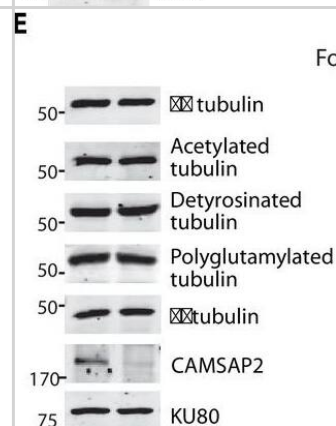
**Immunocytochemistry/ Immunofluorescence: CAMSAP1L1 Antibody [NBP1-21402] - CAMSAP2 is required for maintaining non-centrosomal MTs & cell migration in ECs. (G) Staining for CAMSAP2 (white/green), γ-tubulin (red) & DNA (DAPI, blue) in HUVECs. Image collected & cropped by CiteAb from the following publication (<https://elifesciences.org/articles/33864>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.**



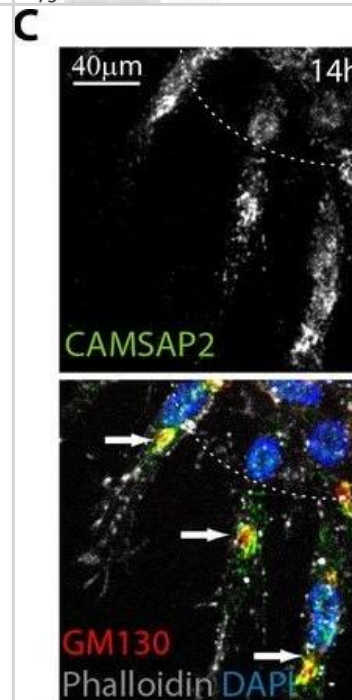
**Western Blot: CAMSAP1L1 Antibody [NBP1-21402]** - The centrosome is not essential for angiogenic migration & sprouting. (A) WBs of total extract from HUVECs treated or not treated with centrinone used to quantify the levels of  $\alpha$ -tubulin & CAMSAP2 protein expression as well as of tubulin post-translational modifications (acetylated, detyrosinated & polyglutamylated tubulin); Ku80 antibody used as loading control,  $n = 3$  independent experiments &  $n = 4$  for CAMSAP2. Image collected & cropped by CiteAb from the following publication (<https://elifesciences.org/articles/33864>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



**Western Blot: CAMSAP1L1 Antibody [NBP1-21402]** - CAMSAP2 is required for maintaining non-centrosomal MTs & cell migration in ECs. (E) WBs of extracts of HUVECs treated as in (D) used to quantify the levels of  $\alpha$ -tubulin & CAMSAP2 expression & the levels of tubulin post-translational modifications (acetylated, detyrosinated & polyglutamylated tubulin); Ku80 antibody used as loading control,  $n = 3$  independent experiments. Image collected & cropped by CiteAb from the following publication (<https://elifesciences.org/articles/33864>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



**Immunocytochemistry/ Immunofluorescence: CAMSAP1L1 Antibody [NBP1-21402]** - CAMSAP2 participates in Golgi polarization during 2D migration & 3D sprouting. (C) Staining for CAMSAP2 (white/green), Golgi (GM130, red), F-actin (phalloidin, white) & DNA (DAPI, blue) in HUVEC spheroid sprouting 14 hr after 3D spheroid embedding. Z-maximum projections of confocal images shown; arrows show polarized Golgi co-localizing with CAMSAP2 stretches & the dashed line indicates the position of spheroid body. Data shown using box plots; Student's unpaired two-tailed t-test (A), Mann-Whitney U test (B): \* $p < 0.05$ , ns, no significant difference. [10.7554/eLife.33864.028](https://doi.org/10.7554/eLife.33864.028) Figure 5—figure supplement 1—source data 1. An Excel sheet with numerical data on the quantification of effect of CAMSAP2 depletion on the polarization of centrosome during migration & the speed, duration & length of Rab6 tracks in 2D migrating ECs represented as plots in Figure 5—figure supplement 1A,B. An Excel sheet with numerical data on the quantification of effect of CAMSAP2 depletion on the polarization of centrosome during migration & the speed, duration & length of Rab6 tracks in 2D migrating ECs represented as plots in Figure 5—figure supplement 1A,B. Image collected & cropped by CiteAb from the following publication (<https://elifesciences.org/articles/33864>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

- Ho KH, Jayathilake A, Mahircan Y et al. CAMSAP2 localizes to the Golgi in islet  $\beta$ -cells and facilitates Golgi-ER trafficking iScience 2023-02-17 [PMID: 36718359] (Western Blot, Immunocytochemistry/ Immunofluorescence, Human, Rat)
- Silverman JB, Krystofiak EE, Caplan LR et al. Organization of a cytoskeletal superstructure in the apical domain of intestinal tuft cells J Cell Biol 2024-10-01 [PMID: 39352498]
- Rosito M, Sanchini C, Gosti G et al. Microglia reactivity entails microtubule remodeling from acentrosomal to centrosomal arrays Cell reports 2023-02-13 [PMID: 36787220] (Immunocytochemistry/ Immunofluorescence, Mouse)
- Tavares S, Liv N, Pasolli M et al. FER regulates endosomal recycling and is a predictor for adjuvant taxane benefit in breast cancer Cell reports [PMID: 35385742] (ICC/IF, Human)
- Coquand L, Victoria GS, Tata A et al. CAMSAPs organize an acentrosomal microtubule network from basal varicosities in radial glial cells The Journal of cell biology 2021-08-02 [PMID: 34019079]
- Noordstra I, Liu Q et al. Control of apico-basal epithelial polarity by the microtubule minus-end-binding protein CAMSAP3 and spectraplakins ACF7. J Cell Sci 2016-11-15 [PMID: 27802168] (ICC/IF, Human)
- Yau K W, van Beuningen S F et al. Microtubule minus-end binding protein CAMSAP2 controls axon specification and dendrite development. Neuron 2014-04-06 [PMID: 24908486] (WB, Human)
- Martin M, Veloso A, Wu J et al. Control of endothelial cell polarity and sprouting angiogenesis by non-centrosomal microtubules. Elife 2018-03-16 [PMID: 29547120] (ICC/IF, WB, Human)
- Jiang K, Faltova L, Hua S et al. Structural Basis of Formation of the Microtubule Minus-End-Regulating CAMSAP-Katanin Complex Structure 2018-01-01 [PMID: 29395789] (WB)
- Yang C, Wu J, de Heus C et al. EB1 and EB3 regulate microtubule minus end organization and Golgi morphology J. Cell Biol. 2017-08-16 [PMID: 28814570] (WB)
- Jensen MA, Wilkinson JE, Krainer AR. Splicing factor SRSF6 promotes hyperplasia of sensitized skin. Nat. Struct. Mol. Biol. 2014-02-06 [PMID: 24440982] (WB, ICC/IF, Rat, Human)







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### **Products Related to NBP1-21402**

|               |                                                     |
|---------------|-----------------------------------------------------|
| HAF008        | Goat anti-Rabbit IgG Secondary Antibody [HRP]       |
| NB7160        | Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP] |
| NBP2-24891    | Rabbit IgG Isotype Control                          |
| NBP1-82935PEP | CAMSAP1L1 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.

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