

# Product Datasheet

## ZKSCAN3 Antibody - BSA Free NBP1-31566

Unit Size: 100 ul

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

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**NBP1-31566**

ZKSCAN3 Antibody - BSA Free

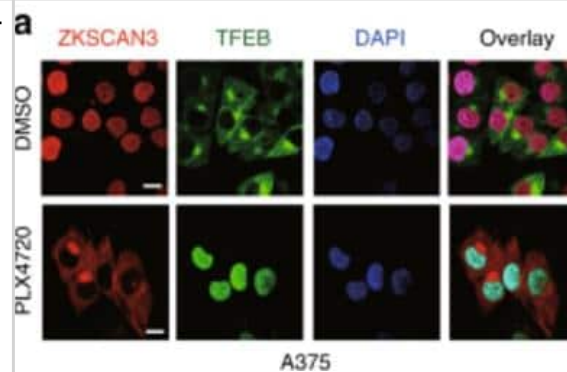
Product Information	
Unit Size	100 ul
Concentration	1.0 mg/ml
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS
Target Molecular Weight	61 kDa

Product Description	
Host	Rabbit
Gene ID	80317
Gene Symbol	ZKSCAN3
Species	Human
Immunogen	Recombinant protein encompassing a sequence within the center region of human ZKSCAN3. The exact sequence is proprietary.

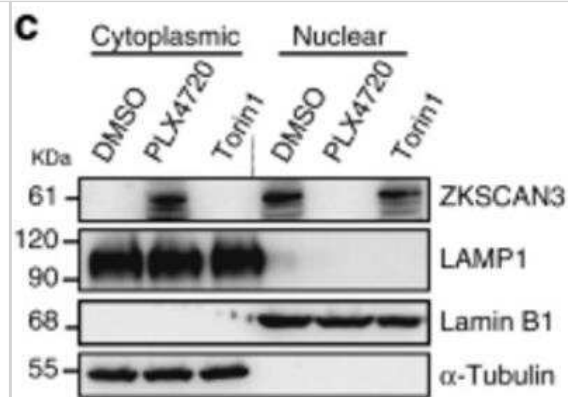
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:500-1:3000, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:500, Immunohistochemistry-Paraffin 1:100-1:500

**Images**

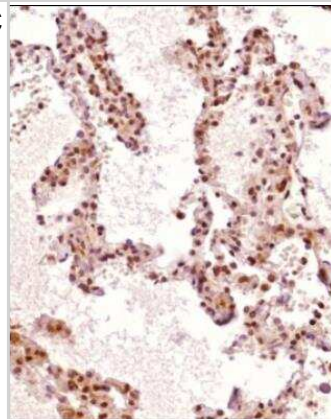
Immunocytochemistry/Immunofluorescence: ZKSCAN3 Antibody [NBP1-31566] - PLX4720 induces JNK2/p38 MAPK-dependent cytoplasmic translocation of ZKSCAN3. Representative confocal images of subcellular translocation of endogenous TFEB (green) and ZKSCAN3 (red) in A375 cells treated with PLX4720 (1  $\mu$ M, 12 h). n = 3 independent experiments. Image collected and cropped by Citeab from the following publication (Transcriptional regulation of autophagy-lysosomal function in BRAF-driven melanoma progression and chemoresistance. Nat Commun (2019) licensed under a CC-BY license.



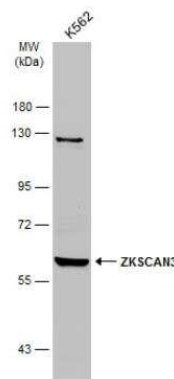
Western Blot: ZKSCAN3 Antibody [NBP1-31566] - Western Blot: ZKSCAN3 Antibody [NBP1-31566] - Immunoblots for ZKSCAN3 in cytoplasmic and nuclear fractions of A375 cells treated with DMSO, PLX4720 (1  $\mu$ M, 12 h), or Torin1 (1  $\mu$ M, 3 h). Lamin B1 serves as the control for the nuclear fractions, whereas LAMP1 and Tubulin are the control of the cytoplasmic fractions. Note that PLX4720 induces cytoplasmic enrichment of ZKSCAN3, whereas Torin1 has no effect on its nucleocytoplasmic redistribution. Image collected and cropped by Citeab from the following publication (Transcriptional regulation of autophagy-lysosomal function in BRAF-driven melanoma progression and chemoresistance. Nat Commun (2019) licensed under a CC-BY license.



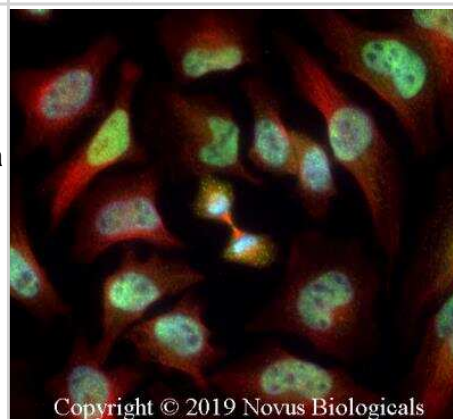
Immunohistochemistry-Paraffin: ZKSCAN3 Antibody [NBP1-31566] - IHC analysis of a formalin fixed paraffin embedded (FFPE) tissue section of human lung using ZKSCAN3 antibody at 1:200 dilution. The primary antibody binding to ZKSCAN3 was detected using HRP conjugated anti-rabbit secondary antibody with DAB reagent, and the sections were further counterstained with hematoxylin for labeling cellular nuclei. Strong nuclear reactivity was observed.



Western Blot: ZKSCAN3 Antibody [NBP1-31566] - Whole cell extract (30  $\mu$ g) was separated by 7.5% SDS-PAGE, and the membrane was blotted with ZKSCAN3 antibody [N1C2] diluted at 1:1000. The HRP-conjugated anti-rabbit IgG antibody (NBP2-19301) was used to detect the primary antibody.



Immunocytochemistry/Immunofluorescence: ZKSCAN3 Antibody [NBP1-31566] - HeLa cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.5% Triton-X100. The cells were incubated with anti-ZKSCAN3 at 2  $\mu$ g/ml overnight at 4C and detected with an anti-rabbit Dylight 488 (Green) at a 1:500 dilution. Alpha tubulin (DM1A) NB100-690 was used as a co-stain at a 1:1000 dilution and detected with an anti-mouse Dylight 550 (Red) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



## Publications

Li, S;Song, Y;Quach, C;Guo, H;Jang, GB;Maazi, H;Zhao, S;Sands, NA;Liu, Q;In, GK;Peng, D;Yuan, W;Machida, K;Yu, M;Akbari, O;Hagiya, A;Yang, Y;Punj, V;Tang, L;Liang, C; Transcriptional regulation of autophagy-lysosomal function in BRAF-driven melanoma progression and chemoresistance Nat Commun 2019-04-12 [PMID: 30979895] (ICC/IF, Human)

Chi Y, Xu H, Wang F et al. ZKSCAN3 promotes breast cancer cell proliferation, migration and invasion. Biochem. Biophys. Res. Commun. 2018-07-23 [PMID: 30049438] (IF/IHC, WB, Human)



## Procedures

### Western Blot protocol for ZKSCAN3 Antibody (NBP1-31566)

ZKSCAN3 Antibody:

Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 10-25 ug of total protein per lane.
2. Transfer proteins to PVDF membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain the membrane with Ponceau S (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot TBS -0.05% Tween 20 (TBST).
5. Block the membrane in 5% Non-fat milk in TBST (blocking buffer) for at least 1 hour.
6. Wash the membrane in TBST three times for 10 minutes each.
7. Dilute anti-ZKSCAN3 primary antibody in blocking buffer and incubate overnight at 4C with gentle rocking.
8. Wash the membrane in TBST three times for 10 minutes each.
9. Incubate the membrane in diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturer's instructions) for 1 hour at room temperature.
10. Wash the blot in TBST three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions.

### Immunocytochemistry/Immunofluorescence protocol for ZKSCAN3 Antibody (NBP1-31566)

ZKSCAN3 Antibody:

Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and wash the cells briefly in PBS. Add 10% formalin to the dish and fix at room temperature for 10 minutes.
2. Remove the formalin and wash the cells in PBS.
3. Permeablize the cells with 0.1% Triton X100 or other suitable detergent for 10 min.
4. Remove the permeablization buffer and wash three times for 10 minutes each in PBS. Be sure to not let the specimen dry out.
5. To block nonspecific antibody binding, incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
6. Add primary antibody at appropriate dilution and incubate overnight at 4C.
7. Remove primary antibody and replace with PBS. Wash three times for 10 minutes each.
8. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
9. Remove secondary antibody and replace with PBS. Wash three times for 10 minutes each.
10. Counter stain DNA with DAPI if required.



**Immunohistochemistry-Paraffin protocol for ZKSCAN3 Antibody (NBP1-31566)**

ZKSCAN3 Antibody:

Immunohistochemistry-Paraffin Embedded Sections

**Antigen Unmasking:**

Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes.

**Staining:**

1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in wash buffer for 5 minutes.
3. Block each section with 100-400 ul blocking solution for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4 C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul biotinylated diluted secondary antibody. Incubate 30 minutes at room temperature.
7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
8. Add 100-400 ul Streptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
9. Wash sections three times in wash buffer for 5 minutes each.
10. Add 100-400 ul DAB substrate to each section and monitor staining closely.
11. As soon as the sections develop, immerse slides in deionized water.
12. Counterstain sections in hematoxylin.
13. Wash sections in deionized water two times for 5 minutes each.
14. Dehydrate sections.
15. Mount coverslips.





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### **Products Related to NBP1-31566**

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HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
H00080317-P02-10ug	Recombinant Human ZKSCAN3 GST (N-Term) Protein

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### **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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