

SUZ12 | Validation File

TARGET SUZ12

CLONE NAME 220A

DESCRIPTION mouse monoclonal

ANTIGEN USED MBP-SUZ12 recombinant protein (full length protein)

ISOTYPE IgG1

SPECIES REACTIVITY human and mouse

LOCALIZATION nuclear

POSITIVE CONTROL Tonsil

STORAGE BUFFER Tissue culture supernatant: 0.02% sodium azide

STORAGE Aliquot and store at 4C. Do not freeze

 Recommended

 Inconclusive

 Not Recommended

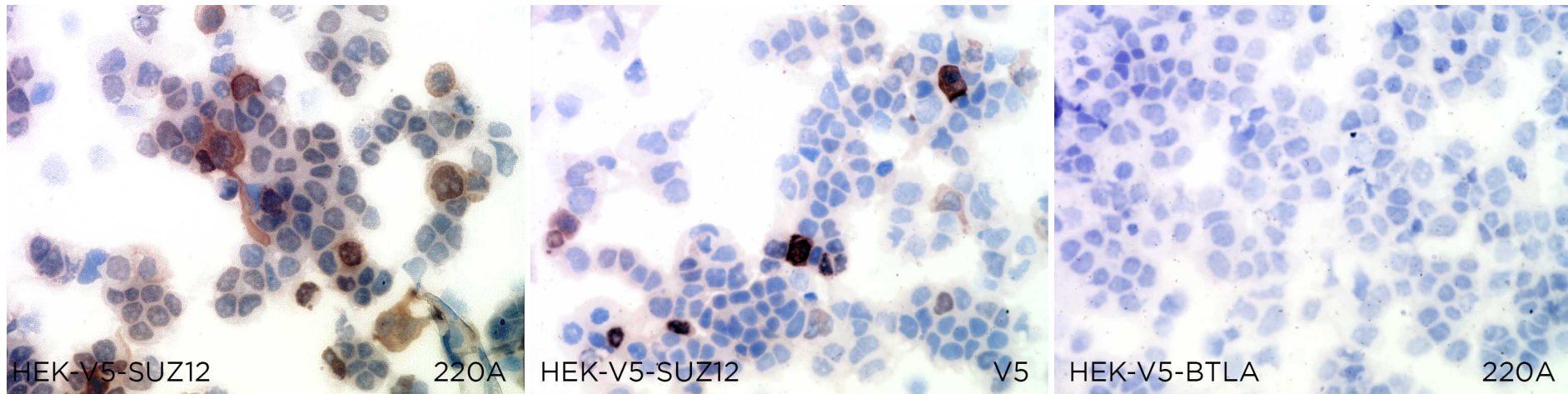
 Not Tested

APPLICATIONS

● | ICC | Immunocytochemistry

220A is able to detect human SUZ12 protein in immunocytochemistry

To confirm that 220A mAb recognizes human SUZ12 protein, immunocytochemistry on frozen cytospin preparations of V5-tagged human SUZ12 expressed in HEK293T was performed. Labeling with the anti-V5 mAb confirmed the efficiency of transfection. Cytospin preparation of V5-tagged human BTLA protein was used as a negative control.



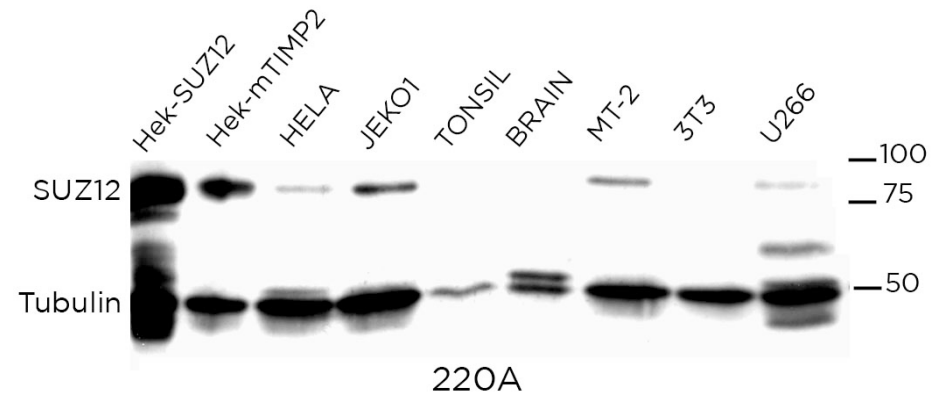
● | WB | **Western Blotting**

220A mAb is able to detect human SUZ12 protein by WB.

DILUTION 1:100(purified antibody 1mg/ml)

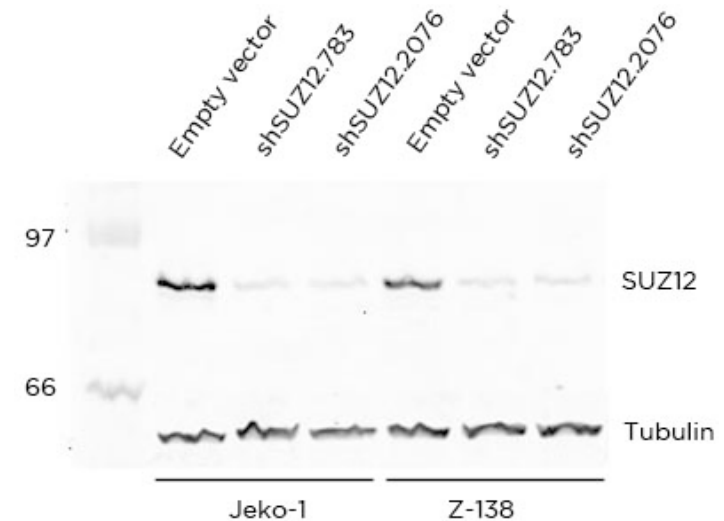
LANES

- Lane 1 Hek-SUZ12-V5 (30ug) (+)
- Lane 2 Hek-mTIMP2 (30ug) (-)
- Lane 3 Hela cell line (200ug) (+)
- Lane 4 Jeko1 cell line (200ug) (+)
- Lane 5 human tonsil (200ug) (-)
- Lane 6 human brain (200ug) (-)
- Lane 7 MT-2 cell line (200ug) (+)
- Lane 8 3T3 mouse cell line (200ug) (-)
- Lane 9 U266 cell line (200ug) (+)



Predicted molecular weight: **83kDa**

Effect of SUZ12 RNA interference (siRNA) in Jeko-1 and Z-138 mantle cell lymphoma cell lines treated with two different hairpins against SUZ12 during three days. A control cell line (empty vector) was used as negative control. Expression of SUZ12 was analyzed using 220A mAb. A decrease of protein expression was observed in siSUZ12 Jeko-1 and Z-138 cell extracts confirming antibody specificity. Band signals were normalized with tubulin as a loading control.

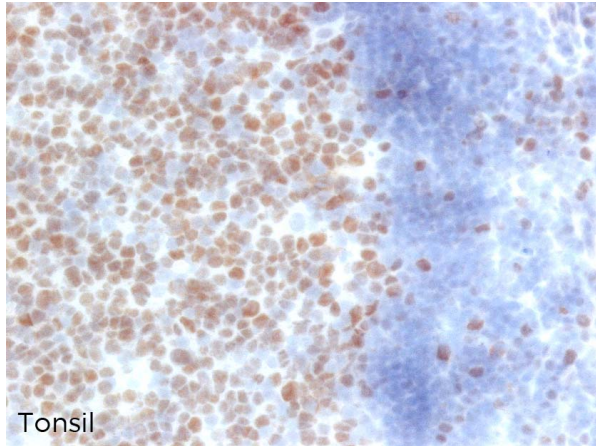


● | IHC-F | **Immunohistochemistry (frozen)**

220A mAb can be used to detect SUZ12 protein in human frozen tissues.

TISSUE SAMPLE Human Tonsil

DILUTION 1:500 (purified antibody 1mg/ml)



● IHC-P | **Immunohistochemistry (paraffin)**

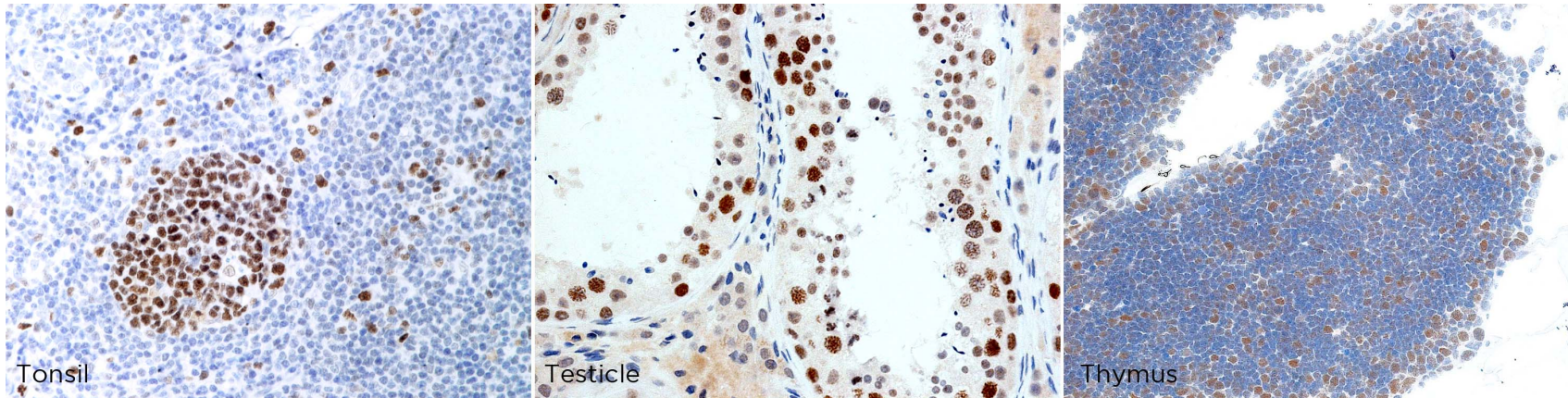
220A mAb can be used to detect SUZ12 protein in human paraffin tissues

TISSUE SAMPLE Human tonsil, testicle and thymus

DILUTION 1:500 purified antibody

ANT. RETRIEVAL 20 minutes ER2 (Tris-EDTA)

DETECTION SYSTEM Novolink kit (BondMax Leica)

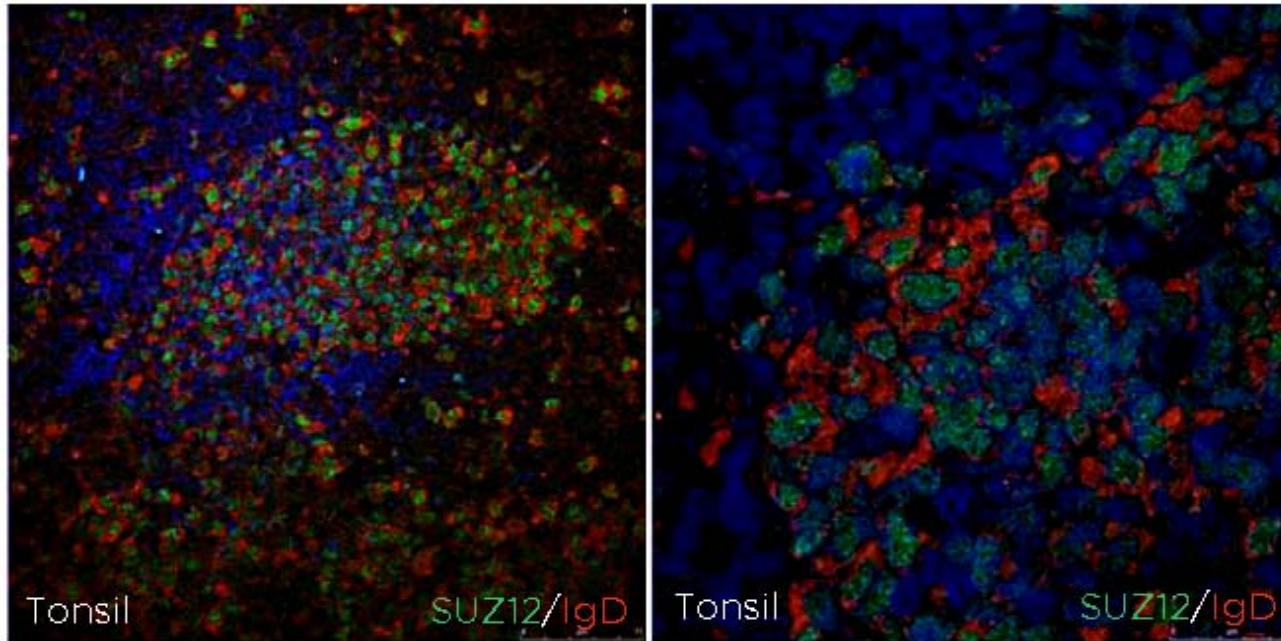


● | IF | **Immunofluorescence (paraffin)**

220A mAb can be used to detect SUZ12 protein by immunofluorescence

TISSUE SAMPLE Tonsil

DILUTION 220A antibody was diluted 1:100 (purified 1mg/ml)
IgD (DAKO rabbit polyclonal) antibody was diluted 1:50



● | FC | **Flow Cytometry** Not tested

● | IP | **Immunoprecipitation** Not Tested

SOLD BY: Abcam

REFERENCES

Martín-Pérez D, Sánchez E, Maestre L, Suela J, Vargiu P, Di Lisio L, Martínez N, Alves J, Piris MA, Sánchez-Beato M. Deregulated expression of the polycomb-group protein SUZ12 target genes characterizes mantle cell lymphoma. *Am J Pathol.* 2010 Aug;177(2):930-42.

Li H, Cai Q, Wu H, Vathipadiekal V, Dobbin ZC, Li T, Hua X, Landen CN, Birrer MJ, Sánchez-Beato M, Zhang R. SUZ12 promotes human epithelial ovarian cancer by suppressing apoptosis via silencing HRK. *Mol Cancer Res.* 2012 Nov;10(11):1462-72. doi: 10.1158/1541-7786.MCR-12-0335. Epub 2012 Sep 10.

Zhang M, Wang Y, Jones S, Sausen M, McMahon K, Sharma R, Wang Q, Belzberg AJ, Chaichana K, Gallia GL, Gokaslan ZL, Riggins GJ, Wolinsky JP, Wood LD, Montgomery EA, Hruban RH, Kinzler KW, Papadopoulos N, Vogelstein B, Bettegowda C. Somatic mutations of SUZ12 in malignant peripheral nerve sheath tumors. *Nature Genetics.* November 2014. 46(11):1170-2.

Cho YJ, Kim SH, Kim EK, Han JW, Shin KH, Hu H, Kim KS, Choi YD, Kim S, Lee YH, Suh JS, Ahn JB, Chung HC, Noh SH, Rha SY, Jung ST, Kim HS. Prognostic implications of polycomb proteins ezh2, suz12, and eed1 and histone modification by H3K27me3 in sarcoma. *BMC Cancer.* 2018 Feb 7;18(1):158.