

PRIMPOL | Validation File

TARGET PRIMPOL (DNA-directed primase/polymerase protein)

CLONE NAME JUAM71D

DESCRIPTION rat monoclonal

ANTIGEN USED His-PRIMPOL (full length)

ISOTYPE IgG2b

SPECIES REACTIVITY human

LOCALIZATION nuclear

POSITIVE CONTROL IgG2b

STORAGE BUFFER Tissue culture supernatant: 0.02% sodium azide

Purified antibody: PBS plus 1%BSA and 0.02% sodium azide. MAb concentration: 1mg/ml

STORAGE Aliquot and store at 4C. Do not freeze



Recommended



Inconclusive



Not Recommended



Not Tested

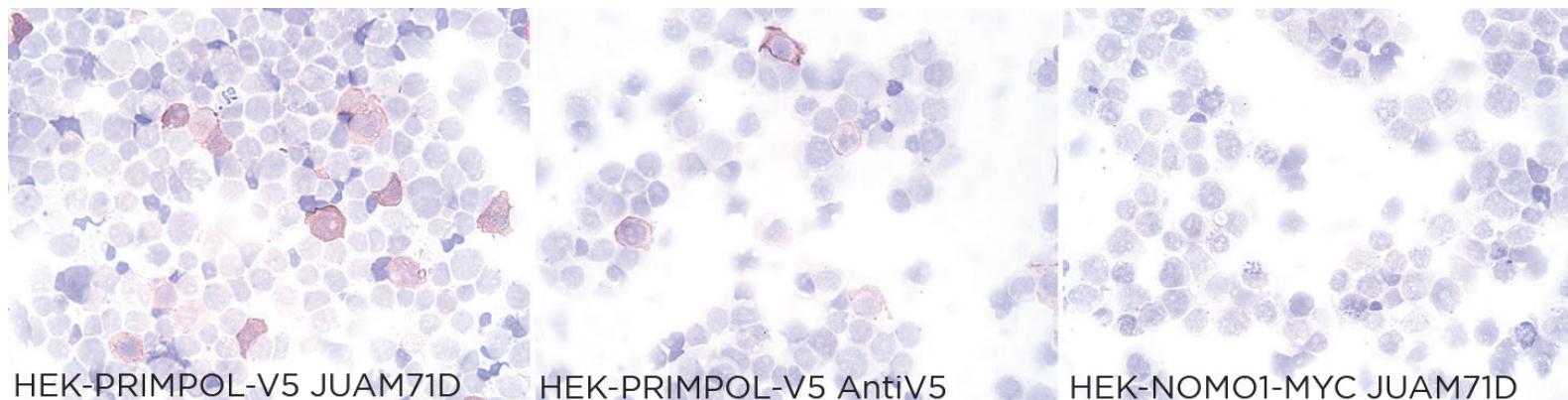
APPLICATIONS

ICC | *Immunocytochemistry*

JUAM71D mAb is able to detect human PRIMPOL protein in immunocytochemistry

DILUTION neat supernatant

To confirm that JUAM71D mAb recognizes human PRIMPOL protein, immunocytochemistry on frozen cytopsin preparations of human PRIMPOL expressed in HEK293 cell line was performed. Anti-V5 was used as positive control. Cytospin preparation of human NOMO1 protein was used as a negative control.



| WB | ***Western Blotting***

JUAM71D mAb is able to detect human PRIMPOL protein by WB.

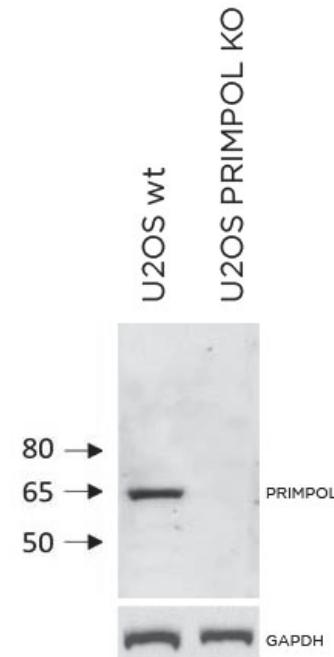
DILUTION neat supernatant

Expected molecular weight: **64kDa**
Observed molecular weight: **64kDa**

LANES

Lane 1 U2OS Primpol WT 100ug (+)
Lane 2 U2OS Primpol KO 100ug (-)

Image kindly provided by Elena Blanco



| IF | **Immunofluorescence (paraffin)**

JUAM71D antibody can be used to detect PRIMPOL in immunofluorescence.

TISSUE SAMPLE U2OS cell line

DILUTION neat supernatant

Expression of inducible wt PrimPol in U2OS PrimPol KO cells (generated by CRISPR-Cas9 technology). Cell cultures were incubated with doxycyclin (1 mg/ml) for 48 hours to induce PrimPol expression before being fixed and incubated with the rat hybridoma JUAM71D/E8 (undiluted) and the secondary antibody anti-rat Alexa488.

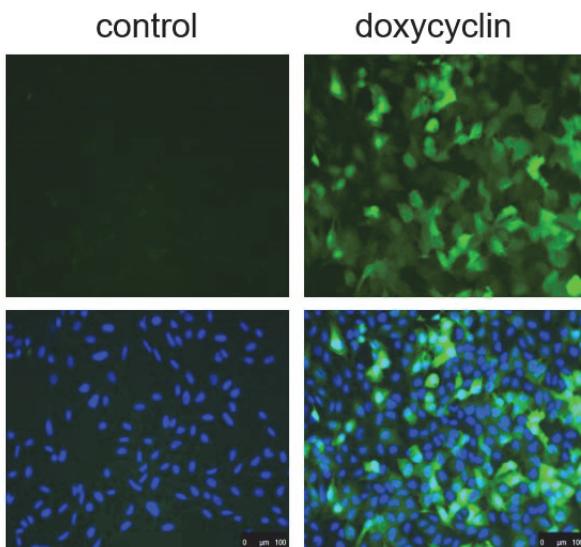


Image kindly provided by Susana Llanos

 | IP | **Immunoprecipitation** Not Tested

 | IHC-F | **Immunohistochemistry (frozen)** Not Tested

 | IHC-P | **Immunohistochemistry (paraffin)** Not Tested

 | FC | **Flow Cytometry** Not tested

REFERENCES

PrimPol-mediated repriming facilitates replication traverse of DNA interstrand crosslinks Daniel González-Acosta, Elena Blanco-Romero, Patricia Ubieto-Capella, Karun Mutreja, Samuel Míguez, Susana Llanos, Fernando García, Javier Muñoz, Luis Blanco, Massimo Lopes and Juan Méndez. EMBO J 2021 Jul 15;40(14):e106355.