

# HJURP (G-15): sc-167023

## BACKGROUND

HJURP (holliday junction recognition protein), also known as FAKTS, URLC9 or hFLEG1, is a 748 amino acid protein that is expressed in thymus, placenta, small intestine, liver, skeletal muscle, bone marrow and colon. When Histone H3-like variant CENP-A nucleosomes are assembled, HJURP localizes in centromeres during late telophase and early G<sub>1</sub> phase, and localizes to the nucleolus during S phase. Considered a centromeric protein, HJURP plays a central role in the incorporation and maintenance of CENP-A at centromeres. HJURP also acts as a specific chaperone for CENP-A and is required for the incorporation of newly synthesized CENP-A molecules into nucleosomes at replicated centromeres. HJURP is considered an indispensable factor for chromosomal stability in immortalized cancer cells and is a potential novel therapeutic target for the development of anticancer drugs.

## REFERENCES

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2. Kato, T., et al. 2007. Activation of Holliday junction recognizing protein involved in the chromosomal stability and immortality of cancer cells. *Cancer Res.* 67: 8544-8553.
3. Black, B.E., et al. 2007. Centromere identity maintained by nucleosomes assembled with Histone H3 containing the CENP-A targeting domain. *Mol. Cell* 25: 309-322.
4. Black, B.E. and Bassett, E.A. 2008. The histone variant CENP-A and centromere specification. *Curr. Opin. Cell Biol.* 20: 91-100.
5. Foltz, D.R., et al. 2009. Centromere-specific assembly of CENP-A nucleosomes is mediated by HJURP. *Cell* 137: 472-484.
6. Dunleavy, E.M., et al. 2009. HJURP is a cell-cycle-dependent maintenance and deposition factor of CENP-A at centromeres. *Cell* 137: 485-497.
7. Sanchez-Pulido, L., et al. 2009. Common ancestry of the CENP-A chaperones Scm3 and HJURP. *Cell* 137: 1173-1174.
8. Bernad, R., et al. 2009. Epigenetic specification of centromeres by CENP-A. *Exp. Cell Res.* 315: 3233-3241.
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## CHROMOSOMAL LOCATION

Genetic locus: *Hjurp* (mouse) mapping to 1 D.

## SOURCE

HJURP (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HJURP of mouse origin.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167023 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

HJURP (G-15) is recommended for detection of HJURP of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for HJURP siRNA (m): sc-140466, HJURP shRNA Plasmid (m): sc-140466-SH and HJURP shRNA (m) Lentiviral Particles: sc-140466-V.

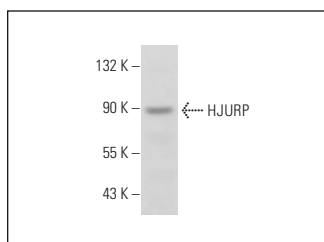
Molecular Weight of HJURP: 83 kDa.

Positive Controls: F9 cell lysate: sc-2245.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



HJURP (G-15): sc-167023. Western blot analysis of HJURP expression in F9 whole cell lysate.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.