



# HIVEP3 (N-12): sc-161708

## BACKGROUND

HIVEP3 (human immunodeficiency virus type I enhancer binding protein 3), alternatively known as KBP1 ( $\kappa$ -binding protein 1), SHN3, KRC, ZNF40C or Schnurri-3, is a 2,406 amino acid cytoplasmic and nuclear transcription factor belonging to the ZAS family. Known to interact with TRAF1, TRAF2 and c-Jun, HIVEP3 positively regulates IL-2 expression in T-cells and inhibits TNF $\alpha$ -induced NF $\kappa$ B activation through several mechanisms. HIVEP3 forms a multimeric complex with AIP5 and RUNX2 and binds DNA via its ZAS2 domain to form dimers, tetramers and complex DNA-protein structures. Containing five C<sub>2</sub>H<sub>2</sub>-type zinc fingers, HIVEP3 can be induced by TPA and undergoes post-translational phosphorylation on threonine and serine residues. While HIVEP3 exists as two known isoforms, additional forms can be generated by polyadenylation or alternative splicing. The gene encoding HIVEP3 maps to human chromosome 1p34.2.

## REFERENCES

- Baumann, G. 1979. Hyponatremia during adrenocorticotropin (ACTH) infusions. *Ann. Intern. Med.* 91: 499.
- Hicar, M.D., et al. 2001. Structure of the human zinc finger protein HIVEP3: molecular cloning, expression, exon-intron structure, and comparison with paralogous genes HIVEP1 and HIVEP2. *Genomics* 71: 89-100.
- Oukka, M., et al. 2002. A mammalian homolog of *Drosophila schnurri*, KRC, regulates TNF receptor-driven responses and interacts with TRAF2. *Mol. Cell.* 9: 121-131.
- Hong, J.W., et al. 2003. Inhibition of NF $\kappa$ B by ZAS3, a zinc-finger protein that also binds to the  $\kappa$ B motif. *Proc. Natl. Acad. Sci. USA* 100: 12301-12306.
- Oukka, M., et al. 2004. Schnurri-3 (KRC) interacts with c-Jun to regulate the IL-2 gene in T cells. *J. Exp. Med.* 199: 15-24.
- Jones, D.C., et al. 2006. Regulation of adult bone mass by the zinc finger adapter protein Schnurri-3. *Science* 312: 1223-1227.
- Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 606649. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: HIVEP3 (human) mapping to 1p34.2; HIVEP3 (mouse) mapping to 4 D2.1.

## SOURCE

HIVEP3 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of HIVEP3 of human origin.

## STORAGE

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

## RESEARCH USE

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

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161708 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-161708 X, 200  $\mu$ g/0.1 ml.

## APPLICATIONS

HIVEP3 (N-12) is recommended for detection of HIVEP3 of mouse, rat and human 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); non cross-reactive with HIVEP1.

Suitable for use as control antibody for HIVEP3 siRNA (h): sc-88010, HIVEP3 siRNA (m): sc-146040, HIVEP3 shRNA Plasmid (h): sc-88010-SH, HIVEP3 shRNA Plasmid (m): sc-146040-SH, HIVEP3 shRNA (h) Lentiviral Particles: sc-88010-V and HIVEP3 shRNA (m) Lentiviral Particles: sc-146040-V.

HIVEP3 (N-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of HIVEP3: 259 kDa.

## 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.

## PROTOCOLS

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