

# ZAP (E-19): sc-244681

## BACKGROUND

ZAP (zinc finger antiviral protein), also known as ZC3HAV1 (zinc finger CCCH-type, antiviral 1), ZC3H2 (zinc finger CCCH domain-containing protein 2) or PARP13, is a 902 amino acid protein that prevents retroviral infection by inducing innate immunity and inhibiting viral gene expression. Highly expressed in liver and kidney and existing as five alternatively spliced isoforms, ZAP shuttles between both cytoplasm and nucleus in a CRM1-dependent manner. ZAP contains one WWE domain, a single PARP catalytic domain and four C3H1-type zinc fingers, two of which are used for binding specific viral RNAs. The gene encoding ZAP maps to human chromosome 7, which comprises nearly 5% of the human genome is linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ZC3HAV1 (human) mapping to 7q34.

## SOURCE

ZAP (E-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZAP 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.

## 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-244681 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ZAP (E-19) is recommended for detection of ZAP of 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).

Suitable for use as control antibody for ZAP siRNA (h): sc-89362, ZAP shRNA Plasmid (h): sc-89362-SH and ZAP shRNA (h) Lentiviral Particles: sc-89362-V.

Molecular Weight of ZAP: 101 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## RESEARCH USE

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

## PROTOCOLS

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