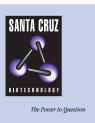
## SANTA CRUZ BIOTECHNOLOGY, INC.

# ZNF491 (I-18): sc-102227



Zinc finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. As a member of the Krüppel  $C_2H_2$ -type zinc finger protein family, ZNF491 (zinc finger protein 491) is a 437 amino acid protein containing thirteen  $C_2H_2$ -type zinc fingers. Localized to the nucleus, ZNF491 is thought to be involved in transcriptional regulation. The gene encoding ZNF491 localizes to chromosome 19, which is recognized for having the greatest gene density of the human chromosomes. Chromosome 19 is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs). Key genes for eye color and hair color also map to chromosome 19.

### REFERENCES

BACKGROUND

- Payre, F. and Vincent, A. 1988. Finger proteins and DNA-specific recognition: distinct patterns of conserved amino acids suggest different evolutionary modes. FEBS Lett. 234: 245-250.
- Berg, J.M. 1988. Proposed structure for the zinc-binding domains from transcription factor IIIA and related proteins. Proc. Natl. Acad. Sci. USA 85: 99-102.
- 3. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. New Biol. 2: 363-374.
- 4. Rosenfeld, R. and Margalit, H. 1993. Zinc fingers: conserved properties that can distinguish between spurious and actual DNA-binding motifs. J. Biomol. Struct. Dyn. 11: 557-570.
- Trettel, F., et al. 2000. A fine physical map of the CACNA1A gene region on 19p13.1-p13.2 chromosome. Gene 241: 45-50.
- Moodie, S.J., et al. 2002. Analysis of candidate genes on chromosome 19 in coeliac disease: an association study of the KIR and LILR gene clusters. Eur. J. Immunogenet. 29: 287-291.
- Leem, S.H., et al. 2004. Closing the gaps on human chromosome 19 revealed genes with a high density of repetitive tandemly arrayed elements. Genome Res. 14: 239-246.

#### CHROMOSOMAL LOCATION

Genetic locus: ZNF491 (human) mapping to 19p13.2.

#### SOURCE

ZNF491 (I-18) is a purified rabbit polyclonal antibody raised against ZNF491 of human origin.

#### **STORAGE**

Store at 4° C, \*\*D0 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 or our catalog for detailed protocols and support products.

#### PRODUCT

Each vial contains 50  $\mu g$  lgG in 500  $\mu l$  PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

#### **APPLICATIONS**

ZNF491 (I-18) is recommended for detection of ZNF491 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZNF491 siRNA (h): sc-97113, ZNF491 shRNA Plasmid (h): sc-97113-SH and ZNF491 shRNA (h) Lentiviral Particles: sc-97113-V.

Molecular Weight of ZNF491: 51 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

#### DATA

ZNF491 (I-18): sc-102227. Western blot analysis of ZNF491 expression in Jurkat whole cell lysate.

### **RESEARCH USE**

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