

# ZNF589 (A-25): sc-134200

## BACKGROUND

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. The majority of zinc-finger proteins contain a Krüppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. ZNF589 (zinc finger protein 589), also known as SZF1 or stem cell zinc finger protein 1, is a 364 amino acid protein that plays a role in the differentiation of hematopoietic stem cells, and may act as a repressor of DNA binding-dependent transcription. ZNF589 belongs to the krueppel C<sub>2</sub>H<sub>2</sub>-type zinc-finger protein family, localizes to nucleus, and contains four C<sub>2</sub>H<sub>2</sub>-type zinc fingers and one KRAB domain. As a result of alternative splicing, three ZNF589 isoforms exist; while the expression of ZNF589 isoform 1 has not been fully characterized, isoform 2 (also known as SZF1-2) has been found to be ubiquitously expressed and isoform 3 (also known as SZF1-1) is only found in CD34<sup>+</sup> cells.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ZNF589 (human) mapping to 3p21.31.

## SOURCE

ZNF589 (A-25) is a Protein A purified rabbit polyclonal antibody raised against synthetic ZNF589 peptide 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 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

ZNF589 (A-25) is recommended for detection of ZNF589 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 ZNF589 siRNA (h): sc-78092, ZNF589 shRNA Plasmid (h): sc-78092-SH and ZNF589 shRNA (h) Lentiviral Particles: sc-78092-V.

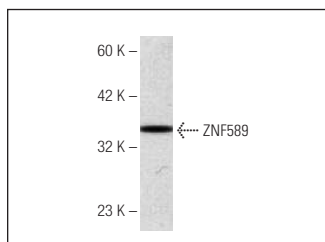
Molecular Weight of ZNF589: 41 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



ZNF589 (A-25): sc-134200. Western blot analysis of ZNF589 expression in Hep G2 whole cell lysate.

## PROTOCOLS

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