

# TFAFA2 (A-14): sc-244255

## BACKGROUND

TFAFA2, also known as FAM19A2 (family with sequence similarity 19 chemokine (C-C motif)-like member A2), is a 131 amino acid cytoplasmic protein that belongs to the TFAFA family. The TFAFA family is composed of five highly homologous genes that encode small secreted proteins. These proteins contain conserved cysteine residues at fixed positions, and are distantly related to MIP-1 $\alpha$ , a member of the CC-chemokine family. Predominantly expressed in specific regions of the brain, TFAFA proteins are thought to function as brain-specific chemokines or neurokinins that act as regulators of immune and nervous cells. The gene that encodes TFAFA2 contains 484,512 bases and maps to human chromosome 12q14.1. Encoding over 1,100 genes, chromosome 12 comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

## REFERENCES

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- Forzano, F., Lituania, M., Viassolo, A., Superti-Furga, V., Wildhardt, G., Zabel, B. and Faravelli, F. 2007. A familial case of achondrogenesis type II caused by a dominant COL2A1 mutation and "patchy" expression in the mosaic father. *Am. J. Med. Genet. A* 143A: 2815-2820.
- Wainwright, H. and Beighton, P. 2008. Visceral manifestations of hypo-chondrogenesis. *Virchows Arch.* 453: 203-207.

## CHROMOSOMAL LOCATION

Genetic locus: FAM19A2 (human) mapping to 12q14.1; Fam19a2 (mouse) mapping to 10 D2.

## SOURCE

TFAFA2 (A-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TFAFA2 of human origin.

## 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-244255 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TFAFA2 (A-14) is recommended for detection of TFAFA2 of mouse, rat and 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)], 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 other TFAFA family members.

TFAFA2 (A-14) is also recommended for detection of TFAFA2 in additional species, including canine.

Suitable for use as control antibody for TFAFA2 siRNA (h): sc-95941, TFAFA2 siRNA (m): sc-154057, TFAFA2 shRNA Plasmid (h): sc-95941-SH, TFAFA2 shRNA Plasmid (m): sc-154057-SH, TFAFA2 shRNA (h) Lentiviral Particles: sc-95941-V and TFAFA2 shRNA (m) Lentiviral Particles: sc-154057-V.

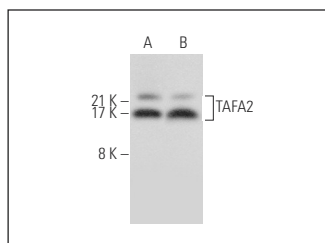
Molecular Weight of TFAFA2 isoforms: 15/4 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



TFAFA2 (A-14): sc-244255. Western blot analysis of TFAFA2 expression in HeLa (A) and Jurkat (B) whole cell lysates.

## 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.