## SANTA CRUZ BIOTECHNOLOGY, INC.

# DPPA5 (N-14): sc-82864



#### BACKGROUND

DPPA5 (developmental pluripotency associated 5), also known as ESG1 (embryonal stem cell-specific gene 1), is a 116 amino acid protein that localizes to the cytoplasm and contains one KH domain. Expressed in embryonic germ (EG), primordial germ (PG) and embryonic stem (ES) cells, DPPA5 plays an important role in the maintenance of ES cell pluripotency and may be necessary for proper embryogenesis. The gene encoding DPPA5 maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

## REFERENCES

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#### CHROMOSOMAL LOCATION

Genetic locus: DPPA5 (human) mapping to 6q13; Dppa5a (mouse) mapping to 9 E1.

#### SOURCE

DPPA5 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of DPPA5 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-82864 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-82864 X, 200  $\mu g/0.1$  ml.

## **APPLICATIONS**

DPPA5 (N-14) is recommended for detection of DPPA5 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 family members DPPA2 or DPPA4.

DPPA5 (N-14) is also recommended for detection of DPPA5 in additional species, including canine.

Suitable for use as control antibody for DPPA5 siRNA (h): sc-77180, DPPA5 siRNA (m): sc-77181, DPPA5 shRNA Plasmid (h): sc-77180-SH, DPPA5 shRNA Plasmid (m): sc-77181-SH, DPPA5 shRNA (h) Lentiviral Particles: sc-77180-V and DPPA5 shRNA (m) Lentiviral Particles: sc-77181-V.

DPPA5 (N-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of DPPA5: 13 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) Immunofluo-rescence: 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.

#### **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.

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.