# DJBP (C-17): sc-86418



The Power to Question

#### **BACKGROUND**

DJ-1 was first identified as a novel oncogene that transforms mouse NIH/3T3 cells in cooperation with activated Ras. Also, DJ-1 positively regulates androgen receptor (AR) by forming a complex with PIASx, a negative regulator of AR. Mutations in the DJ-1 gene have been implicated in Parkinson's disease, and loss of DJ-1 function leads to neurodegeneration. DJBP (DJ-1-binding protein), also known as EF-hand calcium-binding domain-containing protein 6, is a 1,501 amino acid protein that binds the C-terminal region of DJ-1, as well as the DNA binding region of AR. With specific expression in testis, DJBP forms a ternary complex with DJ-1 and AR and colocalizes to the nucleus. Unlike PIASx, DJBP1 acts as an antagonist of DJ-1 by negatively regulating testosterone-dependent AR transactivation activity via recruitment of a histone deacetylase complex. There are six isoforms of DJBP which exist as a result of alternative splicing events.

# **REFERENCES**

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#### **STORAGE**

Store at 4° C, \*\*DO 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.

#### **CHROMOSOMAL LOCATION**

Genetic locus: EFCAB6 (human) mapping to 22q13.2; Efcab6 (mouse) mapping to 15 E2.

#### **SOURCE**

DJBP (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DJBP 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-86418 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

DJBP (C-17) is recommended for detection of DJBP 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 DJBP-5.

Suitable for use as control antibody for DJBP siRNA (h): sc-77155, DJBP siRNA (m): sc-143052, DJBP shRNA Plasmid (h): sc-77155-SH, DJBP shRNA Plasmid (m): sc-143052-SH, DJBP shRNA (h) Lentiviral Particles: sc-77155-V and DJBP shRNA (m) Lentiviral Particles: sc-143052-V.

Molecular Weight of DJBP: 173 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) 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™ Mounting Medium: sc-24941.

#### **RESEARCH USE**

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

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