

DAX-1 (K-17): sc-841

BACKGROUND

Adrenal hypoplasia congenita (AHC) is an X-linked disorder characterized by primary adrenal insufficiency. The disorder, which is lethal if untreated, results in adrenal insufficiency early in infancy and is characterized by low serum concentration of glucocorticoids, mineralocorticoids and androgens and failure to respond to ACTH. AHC has been mapped to chromosome Xp21 at the same or close to an X-linked locus involved in sex determination, DSS (for dosage-sensitive sex reversal). The gene corresponding to DSS and AHC (designated DAX-1 for DSS-AHC critical region on the X chromosome, gene 1) has been cloned and shown to be deleted in AHC deletion patients and mutated in AHC non-deletion patients. The carboxy terminal 250 amino acids of the DAX-1-encoded protein, DAX-1, exhibits approximately 50% continuous similarity to the ligand-binding domain of the members of the nuclear hormone receptor superfamily while the amino terminal domain contains a putative DNA-binding motif. DAX-1 binds to retinoic acid responsive elements and downregulates retinoic acid receptor-mediated transcriptional activation.

CHROMOSOMAL LOCATION

Genetic locus: NROB1 (human) mapping to Xp21.2; Nr0b1 (mouse) mapping to X C1.

SOURCE

DAX-1 (K-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of DAX-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-841 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-841 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DAX-1 (K-17) is recommended for detection of DAX-1 of mouse, rat and 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)], 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).

Suitable for use as control antibody for DAX-1 siRNA (h): sc-35175, DAX-1 siRNA (m): sc-35176, DAX-1 shRNA Plasmid (h): sc-35175-SH, DAX-1 shRNA Plasmid (m): sc-35176-SH, DAX-1 shRNA (h) Lentiviral Particles: sc-35175-V and DAX-1 shRNA (m) Lentiviral Particles: sc-35176-V.

DAX-1 (K-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

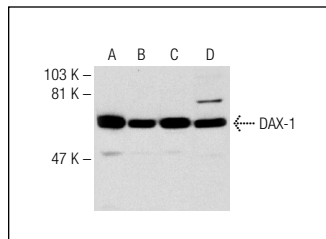
Molecular Weight of DAX-1: 60 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, A-431 nuclear extract: sc-2122 or Jurkat nuclear extract: sc-2132.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



DAX-1 (K-17): sc-841. Western blot analysis of DAX-1 expression in HeLa (A), A-431 (B) and Jurkat (C) nuclear extracts and F9 (D) whole cell lysate.

SELECT PRODUCT CITATIONS

- Kim, J., et al. 1999. The Wilms' tumor suppressor gene (WT1) product regulates DAX-1 gene expression during gonadal differentiation. *Mol. Cell. Biol.* 19: 2289-2299.
- Helguero, L.A., et al. 2006. DAX-1 expression is regulated during mammary epithelial cell differentiation. *Endocrinology* 147: 3249-3259.
- Verrijn Stuart, A.A., et al. 2007. An amino-terminal DAX-1 (NROB1) mis-sense mutation associated with isolated mineralocorticoid deficiency. *J. Clin. Endocrinol. Metab.* 92: 755-761.
- Park, Y.Y., et al. 2007. Distinct repressive properties of the mammalian and fish orphan nuclear receptors SHP and DAX-1. *Mol. Cells* 23: 331-339.
- Naujok, O., et al. 2010. Selective removal of undifferentiated embryonic stem cells from differentiation cultures through HSV1 thymidine kinase and ganciclovir treatment. *Stem Cell Rev.* 6: 450-461.
- Lardone, M.C., et al. 2011. DAX-1 and DAX-1A expression in human testicular tissues with primary spermatogenic failure. *Mol. Hum. Reprod.* 17: 739-746.
- Lanzino, M., et al. 2013. DAX-1, as an androgen-target gene, inhibits aromatase expression: a novel mechanism blocking estrogen-dependent breast cancer cell proliferation. *Cell Death Dis.* 4: e724.

RESEARCH USE

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



Try **DAX-1 (3G8): sc-293452**, our highly recommended monoclonal alternative to DAX-1 (K-17).