

ZXDC (A-12): sc-100273



The Power to Question

BACKGROUND

Zinc finger X-linked duplicated family member C (ZXDC) is an 858 amino acid protein belonging to the ZDX family. Localized to the nucleus, ZXDC is expressed at high levels in heart, kidney, liver and testis, with lower levels of expression in lung, muscle, placenta, small intestine and spleen. ZXDC, with ZDXA, forms a complex that binds to the class II *trans*-activator (CIITA). CIITA, like the X1-binding regulatory factor X (RFX) complex and the nuclear factor Y (NFY) complex, is a transcriptional cofactor that is necessary, but not sufficient, for major histocompatibility complex (MHC) class II gene transcription. ZXDC, by regulating CIITA function, activates the transcription of MHC genes.

REFERENCES

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- Ting, J.P. and Trowsdale, J. 2002. Genetic control of MHC class II expression. *Cell* 109: S21-S33.
- Zika, E., et al. 2003. Histone deacetylase 1/mSin3A disrupts γ interferon-induced CIITA function and major histocompatibility complex class II enhanceosome formation. *Mol. Cell. Biol.* 23: 3091-3102.
- Macleod, K., et al. 2005. Altered ErbB receptor signaling and gene expression in cisplatin-resistant ovarian cancer. *Cancer Res.* 65: 6789-6800.
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- Al-Kandari, W., et al. 2007. The zinc finger proteins ZXDA and ZXDC form a complex that binds CIITA and regulates MHC II gene transcription. *J. Mol. Biol.* 369: 1175-1187.
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CHROMOSOMAL LOCATION

Genetic locus: ZXDC (human) mapping to 3q21.3.

SOURCE

ZXDC (A-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ZXDC of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-100273 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

ZXDC (A-12) is recommended for detection of ZXDC of human and rat 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).

Suitable for use as control antibody for ZXDC siRNA (h): sc-78259, ZXDC shRNA Plasmid (h): sc-78259-SH and ZXDC shRNA (h) Lentiviral Particles: sc-78259-V.

Molecular Weight of ZXDC: 90 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

- Chukkapalli, S., et al. 2014. Ehd3, a regulator of vesicular trafficking, is silenced in gliomas and functions as a tumor suppressor by controlling cell cycle arrest and apoptosis. *Carcinogenesis* 35: 877-885.

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.