

Rex-1 (E-11): sc-377095

BACKGROUND

Rex-1 (for reduced expression), also designated zinc finger protein 42 (ZFP42), is an acidic zinc finger protein. Rex-1 contains four repeats of the zinc finger nucleic acid-binding motif and a potential acidic activator domain, suggesting that it is a regulatory protein. Rex-1 localizes to the nucleus and is highly expressed in embryonic stem (ES) and undifferentiated murine F9 teratocarcinoma cells. At the transcriptional level, expression of Rex-1 is reduced when F9 cells are induced to differentiate by the addition of retinoic acid (RA), and Rex-1 repression is enhanced by E1A. The Oct-3/4 transcription factor can either activate or repress the Rex-1 promoter, depending on the cellular environment, while Oct-6 can lower the expression of Rex-1.

CHROMOSOMAL LOCATION

Genetic locus: ZFP42 (human) mapping to 4q35.2; Zfp42 (mouse) mapping to 8 A4.

SOURCE

Rex-1 (E-11) is a mouse monoclonal antibody raised against amino acids 1-77 mapping at the N-terminus of Rex-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain 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-377095 X, 200 µg/0.1 ml.

Rex-1 (E-11) is available conjugated to agarose (sc-377095 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377095 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377095 PE), fluorescein (sc-377095 FITC), Alexa Fluor® 488 (sc-377095 AF488), Alexa Fluor® 546 (sc-377095 AF546), Alexa Fluor® 594 (sc-377095 AF594) or Alexa Fluor® 647 (sc-377095 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377095 AF680) or Alexa Fluor® 790 (sc-377095 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Rex-1 (E-11) is recommended for detection of Rex-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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 Rex-1 siRNA (h): sc-61460, Rex-1 siRNA (m): sc-61461, Rex-1 shRNA Plasmid (h): sc-61460-SH, Rex-1 shRNA Plasmid (m): sc-61461-SH, Rex-1 shRNA (h) Lentiviral Particles: sc-61460-V and Rex-1 shRNA (m) Lentiviral Particles: sc-61461-V.

Rex-1 (E-11) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

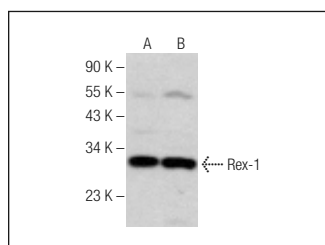
Molecular Weight of Rex-1: 27 kDa.

Positive Controls: PC-3 nuclear extract: sc-2152, DU 145 nuclear extract: sc-24960 or Caki-1 cell lysate: sc-2224.

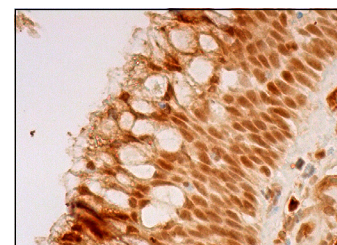
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Rex-1 (E-11): sc-377095. Western blot analysis of Rex-1 expression in PC-3 (A) and DU 145 (B) nuclear extracts.



Rex-1 (E-11): sc-377095. Immunoperoxidase staining of formalin fixed, paraffin-embedded nasopharynx tissue showing nuclear and cytoplasmic staining of respiratory epithelial cells.

SELECT PRODUCT CITATIONS

- Ma, H., et al. 2014. Zfp322a regulates mouse ES cell pluripotency and enhances reprogramming efficiency. *PLoS Genet.* 10: e1004038.
- Wu, Y., et al. 2015. Autophagy and mTORC1 regulate the stochastic phase of somatic cell reprogramming. *Nat. Cell Biol.* 17: 715-725.
- Zeng, Y.T., et al. 2019. Rex-1 promotes EMT-induced cell metastasis by activating the JAK2/Stat3-signaling pathway by targeting SOCS1 in cervical cancer. *Oncogene* 38: 6940-6957.
- Ting, H.K., et al. 2021. Inflammatory regulation by TNF-α-activated adipose-derived stem cells in the human bladder cancer microenvironment. *Int. J. Mol. Sci.* 22: 3987.

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 for detailed protocols and support products.

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