SANTA CRUZ BIOTECHNOLOGY, INC.

PEA3 (H-120): sc-22806

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Several members of the Ets gene family are known to encode sequence-specific DNA binding proteins. These include mouse PU.1, mouse and human Ets-1, *Drosophila* E74, chicken and human Ets-2 and rat GABP-α. Each of these proteins recognizes similar motifs in DNA that share a centrally located 5'-GGAA-3' element. For instance, PEA3 binds the motif 5'-AGGAAG-3' (the PEA-3 motif), but does not bind to the sequence 5'-AGGAAC-3', recognized by PU.1, although PU.1 binds equally well to both sequences. It appears that all of the Ets proteins recognize the same central core sequence but that each protein interacts with unique sequences that flank this core. PEA3 is expressed at readily detectable levels in cells of epithelial and fibroblastic origin but is not expressed in hematopoietic cells. This is in contrast to other members of the Ets gene family, such as Ets-1, Ets-2 and Fli-1, each of which is expressed primarily in cells of hematopoietic origin.

CHROMOSOMAL LOCATION

Genetic locus: ETV4 (human) mapping to 17q21.31; Etv4 (mouse) mapping to 11 D.

SOURCE

PEA3 (H-120) is a rabbit polyclonal antibody raised against amino acids 171-290 mapping near the N-terminus of PEA3 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-22806 X, 200 µg/0.1 ml.

APPLICATIONS

PEA3 (H-120) is recommended for detection of PEA3 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).

PEA3 (H-120) is also recommended for detection of PEA3 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for PEA3 siRNA (h): sc-36205, PEA3 siRNA (m): sc-36206, PEA3 shRNA Plasmid (h): sc-36205-SH, PEA3 shRNA Plasmid (m): sc-36206-SH, PEA3 shRNA (h) Lentiviral Particles: sc-36205-V and PEA3 shRNA (m) Lentiviral Particles: sc-36206-V.

PEA3 (H-120) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

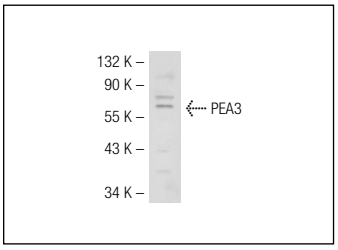
Molecular Weight of PEA3: 62 kDa.

Positive Controls: KNRK nuclear extract: sc-2141, K-562 whole cell lysate: sc-2203 or K-562 nuclear extract: sc-2130.

STORAGE

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

DATA



PEA3 (H-120): sc-22806. Western blot analysis of PEA3 expression in K-562 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Cowden Dahl, K.D., et al. 2007. PEA3 is necessary for optimal epidermal growth factor receptor-stimulated matrix metalloproteinase expression and invasion of ovarian tumor cells. Mol. Cancer Res. 5: 413-421.
2. Munkert, A., et al. 2009. Characterization of the transcriptional regulation of the human MT1-MMP gene and association of risk reduction for focal-segmental glomerulosclerosis with two functional promoter SNPs. Nephrol. Dial. Transplant. 24: 735-742.
3. Chen, Q., et al. 2009. Suppression subtractive hybridization analysis of gene expression during late kidney development identifies the developmentally regulated gene rPEA3. Nephron Exp. Nephrol. 111: e103-e115.
4. Mole, D.J., et al. 2011. Expression of osteopontin coregulators in primary colorectal cancer and associated liver metastases. Br. J. Cancer 104: 1007-1012.
5. van der Gun, B.T., et al. 2011. Transcription factors and molecular epigenetic marks underlying EpCAM overexpression in ovarian cancer. Br. J. Cancer 105: 312-319.

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.