

PDEF (G-10): sc-166846

BACKGROUND

Prostate epithelium-specific Ets transcription factor (PDEF), also designated prostate Ets or SAM pointed domain-containing Ets transcription factor, is a 335 amino acid nuclear protein. PDEF belongs to the Ets family of proteins. This protein, which localizes to prostate epithelial cells, functions as an Ets transcription factor. It upregulates the activity of the p62 promoter but this activity can be downregulated by PSI. It is also involved in the activation of prostate-specific antigen (PSA) by acting as an androgen-independent transactivator.

CHROMOSOMAL LOCATION

Genetic locus: SPDEF (human) mapping to 6p21.31.

SOURCE

PDEF (G-10) is a mouse monoclonal antibody raised against amino acids 1-250 mapping at the N-terminus of PDEF 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-166846 X, 200 µg/0.1 ml.

PDEF (G-10) is available conjugated to agarose (sc-166846 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166846 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166846 PE), fluorescein (sc-166846 FITC), Alexa Fluor® 488 (sc-166846 AF488), Alexa Fluor® 546 (sc-166846 AF546), Alexa Fluor® 594 (sc-166846 AF594) or Alexa Fluor® 647 (sc-166846 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166846 AF680) or Alexa Fluor® 790 (sc-166846 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

PDEF (G-10) is recommended for detection of PDEF of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PDEF siRNA (h): sc-45845, PDEF shRNA Plasmid (h): sc-45845-SH and PDEF shRNA (h) Lentiviral Particles: sc-45845-V.

PDEF (G-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of PDEF: 37 kDa.

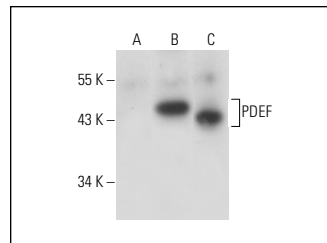
Molecular Weight of glycosylated PDEF: 50 kDa.

Positive Controls: SK-BR-3 cell lysate: sc-2218, T-47D whole cell lysate: sc-364193 or PDEF (h2): 293T Lysate: sc-177713.

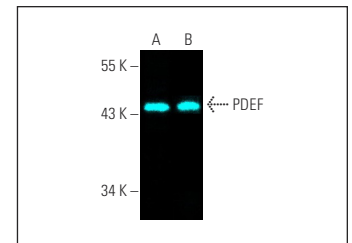
RECOMMENDED SUPPORT REAGENTS

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.

DATA



PDEF (G-10): sc-166846. Western blot analysis of PDEF expression in non-transfected: sc-117752 (A) and human PDEF transfected: sc-177713 (B) 293T whole cell lysates and PC-3 nuclear extract (C).



PDEF (G-10) Alexa Fluor® 647: sc-166846 AF647. Direct fluorescent western blot analysis of PDEF expression in SK-BR-3 (A) and T-47D (B) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214.

SELECT PRODUCT CITATIONS

- Jaiswal, P.K., et al. 2019. Prostate-derived ETS factor (PDEF) modulates Yes associated protein 1 (YAP1) in prostate cancer cells: a potential cross-talk between PDEF and hippo signaling. *Pharmaceuticals* 12: 181.
- Walavalkar, K., et al. 2020. A rare variant of African ancestry activates 8q24 lncRNA hub by modulating cancer associated enhancer. *Nat. Commun.* 11: 3598.
- Centeio, R., et al. 2021. CLCA1 regulates airway mucus production and ion secretion through TMEM16A. *Int. J. Mol. Sci.* 22: 5133.

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.