

POU2F3 (J-25): sc-133920

BACKGROUND

Tissue-restricted POU domain transcription factors, which bind octamer or octamer-like gene sequences, play roles in cellular differentiation and the development of several organs. POU2F3, also designated Oct-11, PLA-1 protein or transcription factor Skn-1, represents a member of the class 2 POU domain family of transcriptional activators, highly related to Oct-2, that are selectively expressed in terminally differentiating epidermal and hair follicles. POU2F3 is characterized by an N-terminal domain that inhibits DNA binding and can inhibit transactivation by Oct-2. Alternative splicing of the N-terminus serves to activate cytokeratin 10 (K10) gene expression. When POU2F3 is expressed in eukaryotic cells it can bind to an octamer site, suggesting that *in vivo* cellular factors modulate the activity of the inhibitory domain to permit DNA-binding. The inhibitory domain does not allow transactivation by POU2F3 or by a heterologous transactivator containing this domain in cis. POU2F3 contributes to epidermal stratification by primarily promoting keratinocyte proliferation and secondarily by enhancing the subsequent keratinocyte differentiation.

CHROMOSOMAL LOCATION

Genetic locus: POU2F3 (human) mapping to 11q23.3; Pou2f3 (mouse) mapping to 9 A5.1.

SOURCE

POU2F3 (J-25) is an affinity purified rabbit polyclonal antibody raised against synthetic POU2F3 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

RESEARCH USE

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

APPLICATIONS

POU2F3 (J-25) is recommended for detection of POU2F3 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), 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 POU2F3 siRNA (h): sc-38776, POU2F3 siRNA (m): sc-38777, POU2F3 shRNA Plasmid (h): sc-38776-SH, POU2F3 shRNA Plasmid (m): sc-38777-SH, POU2F3 shRNA (h) Lentiviral Particles: sc-38776-V and POU2F3 shRNA (m) Lentiviral Particles: sc-38777-V.

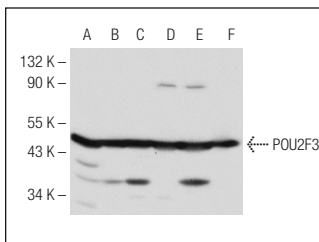
Molecular Weight of POU2F3: 47 kDa.

Positive Controls: human placenta extract: sc-363772, mouse placenta extract: sc-364247 or Hep G2 nuclear extract: sc-364819.

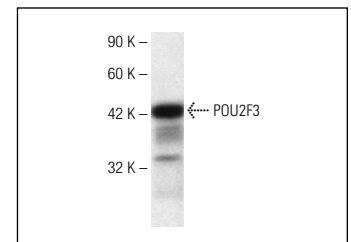
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



POU2F3 (J-25): sc-133920. Western blot analysis of POU2F3 expression in JAR whole cell lysate (A), A-431 (B), A549 (C), Hep G2 (D) and SW480 (E) nuclear extracts and mouse placenta tissue extract (F).



POU2F3 (J-25): sc-133920. Western blot analysis of POU2F3 expression in human placenta tissue extract.

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.

MONOS
Satisfaction
Guaranteed

Try **POU2F3 (6D1): sc-293402**, our highly recommended monoclonal alternative to POU2F3 (J-25).