**BACKGROUND**

The predicted 485 amino acid ONECUT2 (OC-2) protein is a transcriptional activator that functions in activating the transcription of several liver genes, such as HNF3-β. OC-2 is a member of the CUT homeobox family and contains one CUT DNA-binding domain and one homeobox DNA-binding domain. OC-2 shares several regions of sequence homology with OC-1 (HNF6), including a serine/threonine- and proline-rich sequence (STP box). OC-2 localizes to the nucleus and abundant expression of OC-2 is observed in liver and skin tissues, whereas lower expression is demonstrated in testis, brain (occipital cortex) and urinary bladder tissues. The ability of OC-2 to recognize binding sites present in regulatory regions of liver-expressed genes differs from, but overlaps with, those of OC-1. Like OC-1, recombinant OC-2 stimulates transcription of the HNF3-β gene. Research also suggests that OC-2 participates in liver differentiation and metabolism.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: ONECUT2 (human) mapping to 18q21.31; Onecut2 (mouse) mapping to 18 E1.

**SOURCE**

OC-2 (L-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of OC-2 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.

Blocking peptide available for competition studies, sc-51177 P, [100 µg peptide in 0.5 ml PBS containing <0.1% sodium azide and 0.2% BSA].

Available as TransCruz reagent for Gel Supershift and ChiP applications, sc-51177 X, 200 µg/0.1 ml.

**APPLICATIONS**

OC-2 (L-15) is recommended for detection of OC-2 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).


OC-2 (L-15) X TransCruz antibody is recommended for Gel Supershift and ChiP applications.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**DATA**

**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.