**BACKGROUND**

The critical role that the family of regulatory proteins known as cyclins plays in eukaryotic cell cycle regulation is well established. The best characterized cyclin complex is the mitotic cyclin B/Cdc2 p34 kinase, the active component of MPF (maturation promoting factor). Cyclin A accumulates prior to cyclin B in the cell cycle, appears to be involved in control of S phase and has been shown to associate with cyclin dependent kinase-2 (Cdk2). In addition, cyclin A has been implicated in cell transformation and is found in complexes with E1A, transcription factors DP-1 and E2F and retinoblastoma protein p110. Two cyclin A-Cdk2 complex binding proteins, Skp1 p19 and Skp2 p45, have been described. Although the Skps (S phase kinase-associated proteins) associate with the active cyclin A-Cdk2 complex, they do not exhibit any regulatory effects on the complex. Abolition of Skp2 p45 function by either microinjection of anti-p45 antibodies or addition of antisense oligonucleotides prevents entry into S phase of both normal and transformed cells.

**CHROMOSOMAL LOCATION**

Genetic locus: SKP2 (human) mapping to 5p13.2; Skp2 (mouse) mapping to 15 A1.

**SOURCE**

Skp2 p45 (H-435) is a rabbit polyclonal antibody raised against amino acids 1-424 representing full length Skp2 p45 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. Also available as TransCruz reagent for ChIP application, sc-7164 X, 200 µg/0.1 ml.

**APPLICATIONS**

Skp2 p45 (H-435) is recommended for detection of Skp2 p45 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:300).

Skp2 p45 (H-435) is also recommended for detection of Skp2 p45 in additional species, including equine, canine, bovine and porcine.


Skp2 p45 (H-435) X TransCruz antibody is recommended for ChIP assays.

Molecular Weight of Skp2 p45: 45 kDa.

Positive Controls: A-673 cell lysate: sc-2414, HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

**STORAGE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**Try Skp2 p45 (A-2): sc-74477, our highly recommended monoclonal alternative to Skp2 p45 (H-435). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see Skp2 p45 (A-2): sc-74477.