

# FBXO2 (D-19): sc-69400

## BACKGROUND

F-box proteins are critical components of the SCF (Skp1-CUL-1-F-box protein) type E3 ubiquitin ligase complex and are involved in substrate recognition and recruitment for ubiquitination. They are members of a larger family of proteins that are involved in the regulation of a wide variety of cellular processes (including the cell cycle, immune responses, signaling cascades and developmental events) through the targeting of proteins, such as cyclins, cyclin-dependent kinase inhibitors, I $\kappa$ B- $\alpha$  and  $\beta$ -catenin, for proteasomal degradation. FBXO2 (F-box protein 2), also known as FBX2, FBG1 or NFB42, is a 296 amino acid protein that contains one F-box domain and one F-box associated domain. Functioning as a component of the SCF complex, FBXO2 is thought to recognize and bind to select phosphorylated proteins, thereby promoting their ubiquitination and subsequent degradation.

## CHROMOSOMAL LOCATION

Genetic locus: FBXO2 (human) mapping to 1p36.22; Fbxo2 (mouse) mapping to 4 E2.

## SOURCE

FBXO2 (D-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FBXO2 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-69400 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

FBXO2 (D-19) is recommended for detection of FBXO2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

FBXO2 (D-19) is also recommended for detection of FBXO2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FBXO2 siRNA (h): sc-75008, FBXO2 siRNA (m): sc-75009, FBXO2 shRNA Plasmid (h): sc-75008-SH, FBXO2 shRNA Plasmid (m): sc-75009-SH, FBXO2 shRNA (h) Lentiviral Particles: sc-75008-V and FBXO2 shRNA (m) Lentiviral Particles: sc-75009-V.

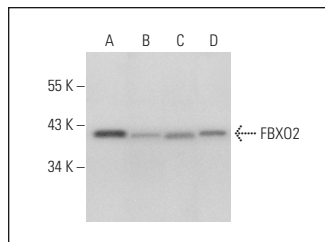
Molecular Weight of FBXO2: 42 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812, Hep G2 cell lysate: sc-2227 or rat brain extract: sc-2392.

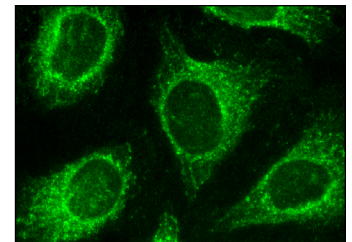
## RECOMMENDED SECONDARY REAGENTS

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



FBXO2 (D-19): sc-69400. Western blot analysis of FBXO2 expression in SH-SY5Y (A), NCI-H1299 (B) and Hep G2 (C) whole cell lysates and rat brain tissue extract (D).



FBXO2 (D-19): sc-69400. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **FBXO2 (A-12): sc-393873** or **FBXO2 (E-9): sc-398111**, our highly recommended monoclonal alternatives to FBXO2 (D-19).