

FBXO34/46 (K-14): sc-109471

BACKGROUND

FBXO34 (F-box only protein 34) and FBXO46 (F-box only protein 46), also designated F-box only protein 34-like (FBXO34L), are a 711 and 646 amino acid proteins, respectively, that each contain one forty amino acid F-box region, making both members of the F-box family. 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. F-box proteins are members of a large family that regulates cell cycle, immune response, signaling cascades and developmental programs by targeting proteins, such as cyclins, cyclin-dependent kinase inhibitors, I κ B- α and β -catenin, for degradation by the proteasome after ubiquitination. Functioning as a component of the SCF complex, FBXO34 and FBXO46 are thought to recognize and bind to select phosphorylated proteins, thereby promoting their ubiquitination and subsequent degradation.

REFERENCES

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6. Schulman, B.A., Carrano, A.C., Jeffrey, P.D., Bowen, Z., Kinnucan, E.R., Finnin, M.S., Elledge, S.J., Harper, J.W., Pagano, M. and Pavletich, N.P. 2000. Insights into SCF ubiquitin ligases from the structure of the Skp1-Skp2 complex. *Nature* 408: 381-386.
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CHROMOSOMAL LOCATION

Genetic locus: FBXO34 (human) mapping to 14q22.3, FBXO46 (human) mapping to 19q13.32; Fbxo34 (mouse) mapping to 14 C1, Fbxo46 (mouse) mapping to 7 A3.

SOURCE

FBXO34/46 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FBXO34 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-109471 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FBXO34/46 (K-14) is recommended for detection of FBXO34 and FBXO46 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

FBXO34/46 (K-14) is also recommended for detection of FBXO34 and FBXO46 in additional species, including equine, canine, bovine and avian.

Molecular Weight of FBXO34: 79 kDa.

Molecular Weight of FBXO46: 69 kDa.

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) 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.

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 or our catalog for detailed protocols and support products.