

CUL-7 (AB13): sc-53809

BACKGROUND

Cullin proteins comprise a distinct family of mediators that participate in the selective targeting of proteins for ubiquitin (Ub)-mediated proteolysis. CUL-7 mediates the third step of ubiquitin conjugation as part of an SCF-like complex consisting of CUL-7, RBX1, SKP1, FBXW8 and GLMN isoform 1, which interacts with a complex of SKP1 and FBXW8, but not with SKP1 alone. This complex is thought to play a role in the degradation of proteins involved in proliferation and/or differentiation. CUL-7 is highly expressed in fetal kidney and adult skeletal muscle in addition to abundant expression in fetal brain and adult pancreas, kidney, placenta and heart. It is also detected in trophoblasts, lymphoblasts, osteoblasts, chondrocytes and skin fibroblasts. Defects in the gene encoding CUL-7 result in 3-M syndrome, an autosomal recessive disorder characterized by severe pre- and postnatal growth retardation, facial dysmorphism, large head circumference and normal intelligence and endocrine function as well as skeletal changes including long slender tubular bones and tall vertebral bodies.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CUL7 (human) mapping to 6p21.1; Cul7 (mouse) mapping to 17 C.

RESEARCH USE

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

SOURCE

CUL-7 (AB13) is a mouse monoclonal antibody raised against amino acids 1665-1672 of CUL-7 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

CUL-7 (AB13) is recommended for detection of CUL-7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for CUL-7 siRNA (h): sc-60471, CUL-7 siRNA (m): sc-60472, CUL-7 shRNA Plasmid (h): sc-60471-SH, CUL-7 shRNA Plasmid (m): sc-60472-SH, CUL-7 shRNA (h) Lentiviral Particles: sc-60471-V and CUL-7 shRNA (m) Lentiviral Particles: sc-60472-V.

Molecular Weight of CUL-7: 185 kDa.

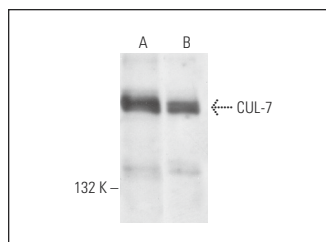
Positive Controls: T98G cell lysate: sc-2294, U-2 OS cell lysate: sc-2295 or CUL-7 (h): 293T Lysate: sc-115286.

RECOMMENDED SUPPORT REAGENTS

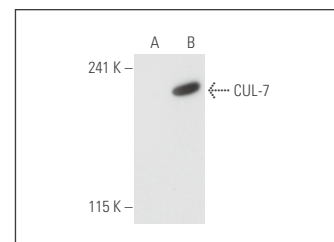
To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



CUL-7 (AB13): sc-53809. Western blot analysis of CUL-7 expression in U-2 OS (A) and T98G (B) whole cell lysates.



CUL-7 (AB13): sc-53809. Western blot analysis of CUL-7 expression in non-transfected: sc-117752 (A) and human CUL-7 transfected: sc-115286 (B) 293T whole cell lysates.

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 for detailed protocols and support products.