# UBE4A (N-15): sc-54478



The Power to Question

# **BACKGROUND**

Ubiquitination is an important mechanism through which three classes of enzymes act in concert to target short-lived or abnormal proteins for destruction. The three classes of enzymes involved in ubiquitination are the ubiquitinactivating enzymes (E1s), the ubiquitin-conjugating enzymes (E2s) and the ubiquitin-protein ligases (E3s). UBE4A (ubiquitin conjugation factor E4 A), also known as E4, UFD2 or UBOX2, is a 1,066 amino acid protein that functions in the multiubiquitin pathway of protein degradation. Expressed in cortical neurons and in tubular kidney cells, UBE4A is the human homolog of the *Saccharomyces cerevisiae* UFD2 protein and functions with the UBE (ubiquitin enzymes) proteins to catalyze ubiquitin chain assembly. UBE4A may be involved in cell growth and differentiation and can act as an autoantigen in scleroderma, a disease characterized by excessive deposits of collagen in the skin or other organs. Two isoforms of UBE4A exist due to alternative splicing events.

# **REFERENCES**

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# **CHROMOSOMAL LOCATION**

Genetic locus: UBE4A (human) mapping to 11q23.3; Ube4a (mouse) mapping to 9 A5.2.

# SOURCE

UBE4A (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UBE4A 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-54478 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

UBE4A (N-15) is recommended for detection of UBE4A 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).

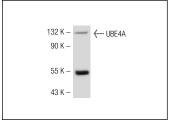
UBE4A (N-15) is also recommended for detection of UBE4A in additional species, including equine, canine and porcine.

Suitable for use as control antibody for UBE4A siRNA (h): sc-63181, UBE4A siRNA (m): sc-63182, UBE4A shRNA Plasmid (h): sc-63181-SH, UBE4A shRNA Plasmid (m): sc-63182-SH, UBE4A shRNA (h) Lentiviral Particles: sc-63181-V and UBE4A shRNA (m) Lentiviral Particles: sc-63182-V.

Molecular Weight of UBE4A: 125 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

# **DATA**



UBE4A (N-15): sc-54478. Western blot analysis of UBE4A expression in K-562 whole cell lysate.

# **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.



Try **UBE4A (B-6):** sc-365904, our highly recommended monoclonal alternative to UBE4A (N-15).

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