



UBE2E3 (m): 293T Lysate: sc-127737

BACKGROUND

The ubiquitin (Ub) pathway involves three sequential enzymatic steps that facilitate the conjugation of Ub and Ub-like molecules to specific protein substrates. The first step requires the ATP-dependent activation of the Ub C-terminus and the assembly of multi-Ub chains by the Ub-activating enzyme known as the E1 component. The Ub chain is then conjugated to the Ub-conjugating enzyme (E2) to generate an intermediate Ub-E2 complex. The Ub-ligase (E3) then catalyzes the transfer of Ub from E2 to the appropriate protein substrate. A wide range of enzymes facilitate in the proteolytic Ub pathway including UBE2E3, also designated UBCH9, which catalyzes the covalent attachment of ubiquitin to other proteins and is involved in the regulation of transepithelial sodium transport in renal cells. UBE2E3 may also be involved in cell growth arrest. The UBE2E3 protein shuttles between the cytoplasm and nucleus in a IPO11-dependent manner. It is ubiquitously expressed at low levels and is highly expressed in skeletal muscle.

REFERENCES

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2. Debonneville, C. and Staub, O. 2004. Participation of the ubiquitin-conjugating enzyme UBE2E3 in NEDD4-2-dependent regulation of the epithelial Na⁺ channel. *Mol. Cell. Biol.* 24: 2397-2409.
3. Hsu, Y.J., Zimmer, W.E. and Goodman, S.R. 2005. Erythrocyte spectrin's chimeric E2/E3 ubiquitin conjugating/ligating activity. *Cell. Mol. Biol.* 51: 187-193.
4. Chang, T.L., Kakhniashvili, D.G. and Goodman, S.R. 2005. Spectrin's E2/E3 ubiquitin conjugating/ligating activity is diminished in sickle cells. *Am. J. Hematol.* 79: 89-96.
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CHROMOSOMAL LOCATION

Genetic locus: Ube2e3 (mouse) mapping to 2 D.

PRODUCT

UBE2E3 (m): 293T Lysate represents a lysate of mouse UBE2E3 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

UBE2E3 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive UBE2E3 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.