



Endo180 (h): 293T Lysate: sc-112680

BACKGROUND

Endo180 (endocytic receptor 180), also known as macrophage mannose receptor C type 2 (MRC2), urokinase plasminogen activator receptor-associated protein (uPARAP) or CD280 antigen, is a ubiquitously expressed, type I membrane protein with predominant expression in fetal lung and kidney. The extracellular domain of Endo180 contains a Fibronectin type II domain, eight C-type lectin domains and a cysteine-rich domain. Endo180 functions as a cell surface receptor and mediates collagen matrix remodeling as well as cell migration by playing a role in the uptake and lysosomal degradation of collagen. Endo180 can bind to gelatin and collagens I, II, IV and V. It may play a role in wound regeneration. In addition, Endo180 can form a complex with uPAR and pro-uPA, thereby partaking in a variety of cellular proteolytic and signaling functions. Endo180 participates in the destruction of connective tissue during the progression of head and neck squamous cell carcinoma.

REFERENCES

1. Wienke, D., MacFadyen, J.R. and Isacke, C.M. 2003. Identification and characterization of the endocytic transmembrane glycoprotein Endo180 as a novel collagen receptor. *Mol. Biol. Cell* 14: 3592-3604.
2. Fernández, N., Alonso, S., Valera, I., Vigo, A.G., Renedo, M., Barbolla, L. and Crespo, M.S. 2005. Mannose-containing molecular patterns are strong inducers of cyclooxygenase-2 expression and prostaglandin E2 production in human macrophages. *J. Immunol.* 174: 8154-8162.
3. Thomas, E.K., Nakamura, M., Wienke, D., Isacke, C.M., Pozzi, A. and Liang, P. 2005. Endo180 binds to the C-terminal region of type I collagen. *J. Biol. Chem.* 280: 22596-22605.
4. Mousavi, S.A., Sato, M., Sporstol, M., Smedsrod, B., Berg, T., Kojima, N. and Senoo, H. 2005. Uptake of denatured collagen into hepatic stellate cells: evidence for the involvement of urokinase plasminogen activator receptor-associated protein/Endo180. *Biochem. J.* 387: 39-46.
5. Boskovic, J., Arnold, J.N., Stillion, R., Gordon, S., Sim, R.B., Rivera-Calzada, A., Wienke, D., Isacke, C.M., Martinez-Pomares, L. and Llorca, O. 2006. Structural model for the mannose receptor family uncovered by electron microscopy of Endo180 and the mannose receptor. *J. Biol. Chem.* 281: 8780-8787.
6. Martinez-Pomares, L., Wienke, D., Stillion, R., McKenzie, E.J., Arnold, J.N., Harris, J., McGreal, E., Sim, R.B., Isacke, C.M. and Gordon, S. 2006. Carbohydrate-independent recognition of collagens by the macrophage mannose receptor. *Eur. J. Immunol.* 36: 1074-1082.
7. Honardoust, H.A., Jiang, G., Koivisto, L., Wienke, D., Isacke, C.M., Larjava, H. and Hakkinen, L. 2006. Expression of Endo180 is spatially and temporally regulated during wound healing. *Histopathology* 49: 634-648.
8. Sulek, J., Wagenaar-Miller, R.A., Shireman, J., Molinolo, A., Madsen, D.H., Engelholm, L.H., Behrendt, N. and Bugge, T.H. 2007. Increased expression of the collagen internalization receptor uPARAP/Endo180 in the stroma of head and neck cancer. *J. Histochem. Cytochem.* 55: 347-353.

CHROMOSOMAL LOCATION

Genetic locus: MRC2 (human) mapping to 17q23.2.

PRODUCT

Endo180 (h): 293T Lysate represents a lysate of human Endo180 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Endo180 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Endo180 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.

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.

RESEARCH USE

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

PROTOCOLS

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