



Keratocan (h): 293T Lysate: sc-115212

BACKGROUND

Small leucine-rich proteoglycans (SLRPs) such as Decorin, Biglycan, Fibromodulin, Keratocan, Lumican and Osteoglycin mediate extracellular matrix organization and are binding partners of TGF β . The Decorin core protein binds to growth factors, intercellular matrix molecules such as Fibronectin and Thrombospondin, and to the Decorin endocytosis receptor. Fibromodulin is a collagen-binding keratan sulphate proteoglycan that influences adhesion processes of connective tissue and plays a role in fibrillogenesis by regulating collagen fibril spacing and thickness. Keratocan (KTN) develops corneal transparency and maintains the stromal matrix structure. Keratocan is a secreted protein in the extracellular matrix that binds to keratan sulfate chains. Keratocan is mainly detected in the cornea, but can also be expressed in trachea, intestine, ovary, lung and skeletal muscle. Defects in the gene encoding for Keratocan can cause cornea plana 2 (CNA2), an autosomal recessive disorder where the forward convex curvature of the cornea is flattened.

REFERENCES

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2. Lehmann, O.J., et al. 2001. A novel Keratocan mutation causing autosomal recessive cornea plana. *Invest. Ophthalmol. Vis. Sci.* 42: 3118-3122.
3. Wentz-Hunter, K., et al. 2001. Keratocan expression is increased in the stroma of keratoconus corneas. *Mol. Med.* 7: 470-477.
4. Carlson, E.C., et al. 2005. Keratocan, a cornea-specific keratan sulfate proteoglycan, is regulated by Lumican. *J. Biol. Chem.* 280: 25541-25547.
5. Kawakita, T., et al. 2005. Keratocan expression of murine keratocytes is maintained on amniotic membrane by down-regulating TGF β signaling. *J. Biol. Chem.* 280: 27085-27092.
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CHROMOSOMAL LOCATION

Genetic locus: KERA (human) mapping to 12q21.33.

PRODUCT

Keratocan (h): 293T Lysate represents a lysate of human Keratocan transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

Keratocan (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Keratocan antibodies. Recommended use: 10-20 μ l 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.