



# brevican (h2): 293T Lysate: sc-113884

## BACKGROUND

Brain tissue expresses a number of different proteoglycans, including both heparan sulfate- and chondroitin sulfate-containing species. While heparan sulfate proteoglycans are present mainly on the cell surface, chondroitin sulfate proteoglycans (CSPGs) are distributed mainly in extracellular spaces of the brain. Brevican is a brain proteoglycan of the aggrecan/versican/neurocan family. In the adult brain, the brevican core protein undergoes proteolytic cleavage and exists as a full-length form, a carboxy-terminal fragment and an amino-terminal fragment. This protein is named brevican since it is the shortest core protein in this family, from the Latin word "brevis", meaning "short". A significant amount of brevican devoid of any glycosaminoglycan chains is present in brain, indicating that brevican is a "part-time" proteoglycan. The gene which encodes brevican maps to mouse chromosome 3 between microsatellite markers D3Mit22 and D3Mit11.

## REFERENCES

1. Yamada, H., Watanabe, K., Shimonaka, M. and Yamaguchi, Y. 1994. Molecular cloning of brevican, a novel brain proteoglycan of the aggrecan/versican family. *J. Biol. Chem.* 269: 10119-10126.
2. Yamada, H., Watanabe, K., Shimonaka, M., Yamasaki, M. and Yamaguchi, Y. 1995. cDNA cloning and the identification of an aggrecanase-like cleavage site in rat brevican. *Biochem. Biophys. Res. Commun.* 216: 957-963.
3. Rauch, U., Meyer, H., Brakebusch, C., Seidenbecher, C., Gundelfinger, E.D., Beier, D.R. and Fassler, R. 1997. Sequence and chromosomal localization of the mouse brevican gene. *Genomics* 44: 15-21.
4. Zhang, H., Kelly, G., Zerillo, C., Jaworski, D.M. and Hockfield, S. 1998. Expression of a cleaved brain-specific extracellular matrix protein mediates glioma cell invasion *in vivo*. *J. Neurosci.* 7: 2370-2376.
5. Aspberg, A., Adam, S., Kostka, G., Timpl, R. and Heinegard, D. 1999. Fibulin-1 is a ligand for the C-type lectin domains of aggrecan and versican. *J. Biol. Chem.* 274: 20444-20449.
6. LocusLink Report (LocusID: 600347). <http://www.ncbi.nlm.nih.gov/LocusLink/>

## CHROMOSOMAL LOCATION

Genetic locus: BCAN (human) mapping to 1q23.1.

## PRODUCT

brevican (h2): 293T Lysate represents a lysate of human brevican transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

brevican (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive brevican 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](http://www.scbt.com) for detailed protocols and support products.