Caspase-mediated cleavage of vimentin at TNLD (429)

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Introduction

Reactome is open-source, open access, manually curated and peer-reviewed pathway database. Pathway annotations are authored by expert biologists, in collaboration with Reactome editorial staff and cross-referenced to many bioinformatics databases. A system of evidence tracking ensures that all assertions are backed up by the primary literature. Reactome is used by clinicians, geneticists, genomics researchers, and molecular biologists to interpret the results of high-throughput experimental studies, by bioinformaticians seeking to develop novel algorithms for mining knowledge from genomic studies, and by systems biologists building predictive models of normal and disease variant pathways.

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Literature references

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Fabregat, A., Jupe, S., Matthews, L., Sidiropoulos, K., Gillespie, M., Garapati, P. et al. (2018). The Reactome Pathway Knowledgebase. *Nucleic Acids Res, 46*, D649-D655. ↗

Fabregat, A., Korninger, F., Viteri, G., Sidiropoulos, K., Marin-Garcia, P., Ping, P. et al. (2018). Reactome graph database: Efficient access to complex pathway data. *PLoS computational biology, 14*, e1005968. ↗
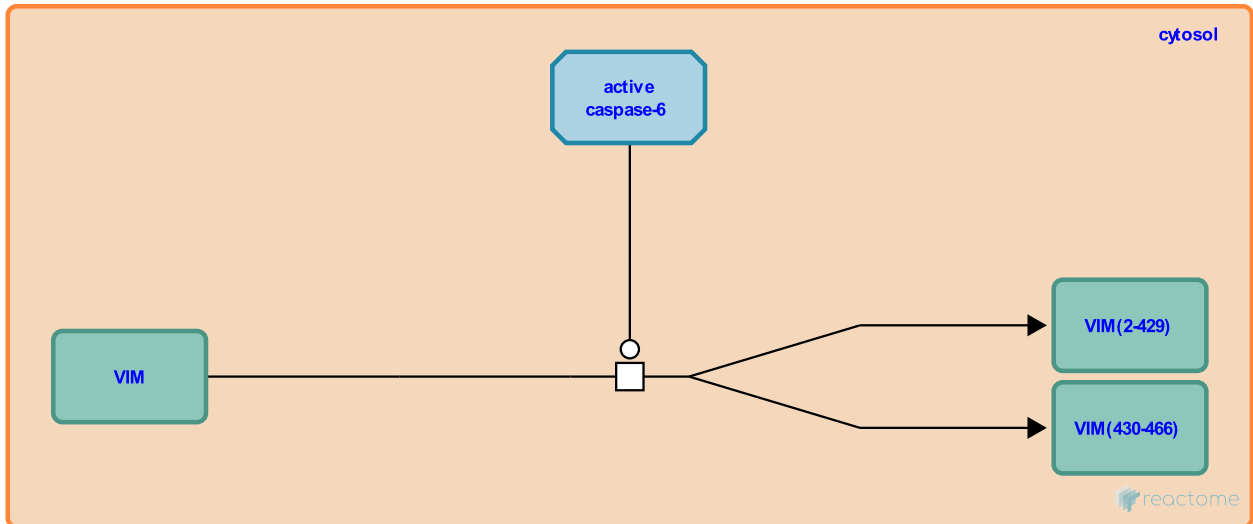
Reactome database release: 88

This document contains 1 reaction (see Table of Contents)

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Stable identifier: R-HSA-350318

Type: transition

Compartments: cytosol

Vimentin is cleaved by several caspases during apoptosis (Morishima et al., 1999, Byun et al., 2001). This clevage disrupts the cytoplasmic network of intermediate filaments and coincides temporally with nuclear fragmentation. Caspase-6 recognizes and cleaves C terminal side of Asp-429.

Literature references

Morishima, N. (1999). Changes in nuclear morphology during apoptosis correlate with vimentin cleavage by different caspases located either upstream or downstream of Bcl-2 action. *Genes Cells, 4*, 401-14. ↗

Editions

2007-09-03	Edited	Matthews, L.
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