

# Active MMP3 can cleave pro-HBEGF to form active HBEGF

D'Eustachio, P., Jassal, B., Tripathi, S.

European Bioinformatics Institute, New York University Langone Medical Center, Ontario Institute for Cancer Research, Oregon Health and Science University.

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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

- Fabregat, A., Sidiropoulos, K., Viteri, G., Forner, O., Marin-Garcia, P., Arnau, V. et al. (2017). Reactome pathway analysis: a high-performance in-memory approach. *BMC bioinformatics*, 18, 142. [↗](#)
- Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics*, 33, 3461-3467. [↗](#)
- 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](#))

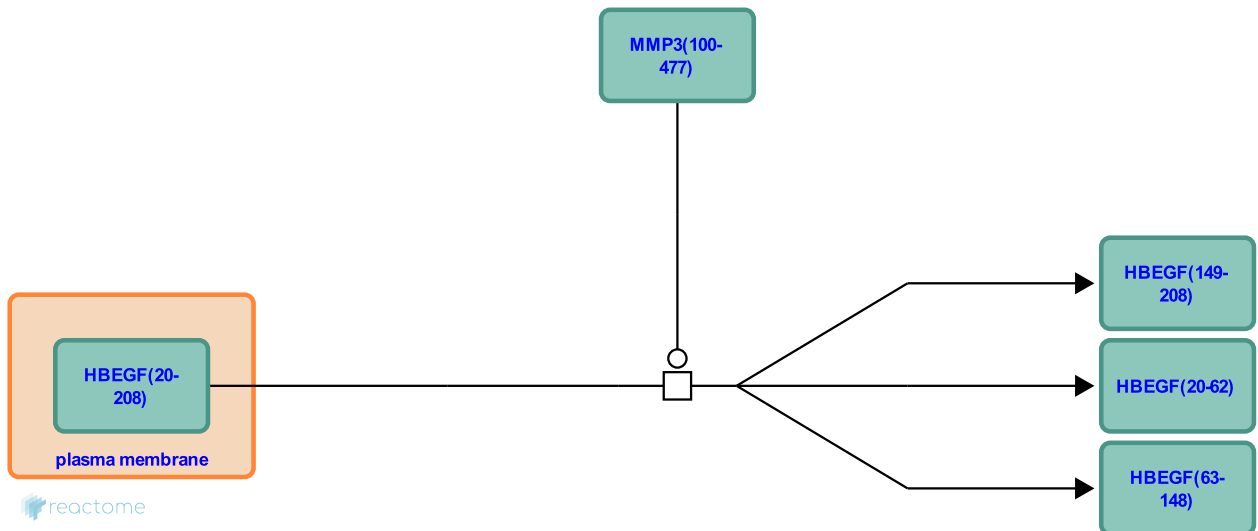
## Active MMP3 can cleave pro-HBEGF to form active HBEGF [↗](#)

**Stable identifier:** R-HSA-2179402

**Type:** transition

**Compartments:** extracellular region

**Inferred from:** [Active Mmp3 can cleave pro-Hbegf to form active Hbegf \(Mus musculus\)](#)



Gastrin can induce cleavage of pro-HBEGF via MMP3, releasing mature HBEGF. This event is based on evidence from mouse experiments (Suzuki et al. 1997).

### Literature references

Suzuki, M., Fernandez, CA., Raab, G., Moses, MA., Klagsbrun, M. (1997). Matrix metalloproteinase-3 releases active heparin-binding EGF-like growth factor by cleavage at a specific jxtamembrane site. *J Biol Chem*, 272, 31730-7. [↗](#)

### Editions

2012-04-04	Authored, Edited	Jassal, B., Tripathi, S.
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