

Mature HBEGF binds to EGFR, triggering dimerisation and autophosphorylation of the receptor

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

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Reactome database release: 88

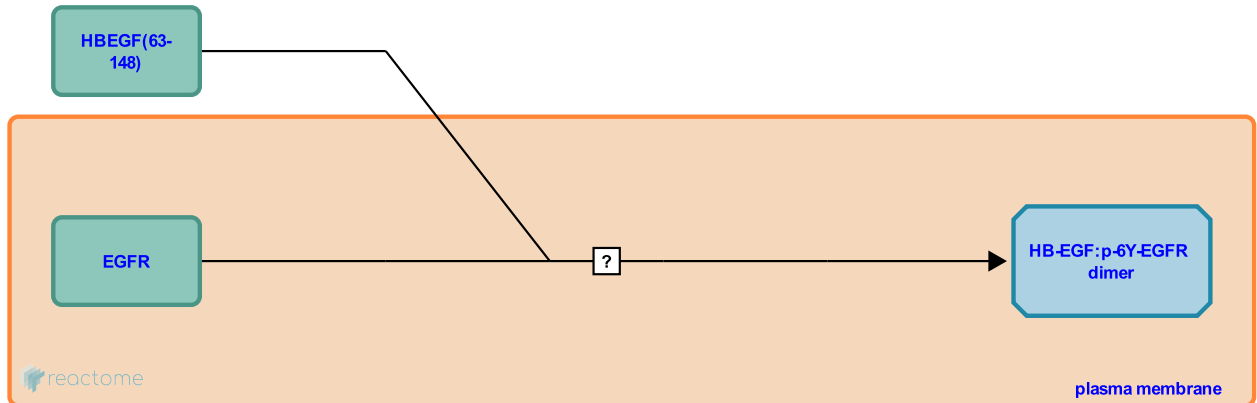
This document contains 1 reaction ([see Table of Contents](#))

Mature HBEGF binds to EGFR, triggering dimerisation and autophosphorylation of the receptor [↗](#)

Stable identifier: R-HSA-2179387

Type: uncertain

Compartments: extracellular region, plasma membrane



The heparin-binding EGF growth factor (HBEGF) is a member of the EGF family of growth factors that binds to and activates the EGF receptor EGFR/ErbB1 and ErbB4 (not shown here) (Higashiyama et al. 1991, Elenius et al. 1997). The details which describe receptor dimerisation on ligand binding and autophosphorylation from experiments in mice have been omitted here.

Literature references

Sun, J., Paul, S., Allison, G., Klagsbrun, M., Elenius, K. (1997). Activation of HER4 by heparin-binding EGF-like growth factor stimulates chemotaxis but not proliferation. *EMBO J*, 16, 1268-78. [↗](#)

Miller, J., Abraham, JA., Fiddes, JC., Higashiyama, S., Klagsbrun, M. (1991). A heparin-binding growth factor secreted by macrophage-like cells that is related to EGF. *Science*, 251, 936-9. [↗](#)

Editions

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