

# Prostate-specific Antigen proteolyzes

## IGF:IGFBP3:ALS

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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

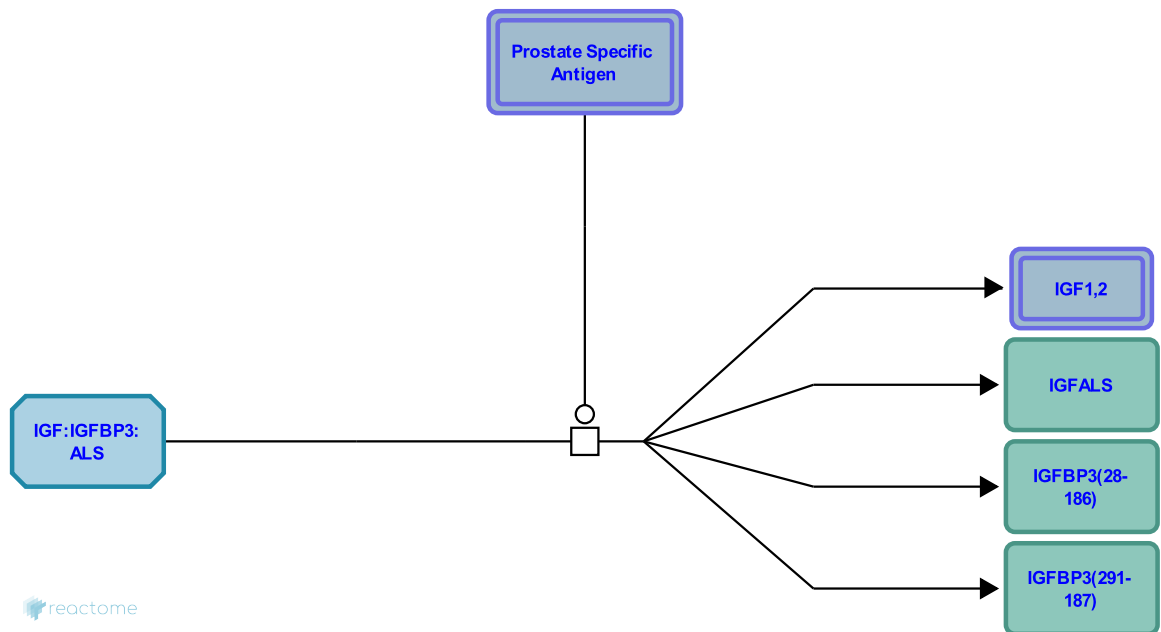
This document contains 1 reaction ([see Table of Contents](#))

# Prostate-specific Antigen proteolyzes IGF:IGFBP3:ALS [↗](#)

**Stable identifier:** R-HSA-381466

**Type:** transition

**Compartments:** extracellular region



Prostate specific Antigen (PSA, KLK3) cleaves IGFBP-3 in the IGF:IGFBP-3:ALS Complex between amino acids 186 and 187. Other cleavage sites were observed but not reproducibly. These may have been caused by impurities in the PSA preparation.

## Literature references

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## Editions

2008-11-20	Edited	Gopinathrao, G., May, B.
2008-12-02	Reviewed	Gillespie, ME., D'Eustachio, P., Matthews, L.