

# Resource Summary Report

Generated by [ASWG](#) on Aug 4, 2026

## CoryneRegNet

RRID:SCR\_002255

Type: Tool

### Proper Citation

CoryneRegNet (RRID:SCR\_002255)

### Resource Information

**URL:** <http://www.coryneregnet.de>

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**Description:** Reference database and analysis platform for corynebacterial transcription factors and gene regulatory networks. It generates links to genome annotations, to identified transcription factors and to the corresponding cis-regulatory elements. CoryneRegNet is based on a multi-layered, hierarchical and modular concept of transcriptional regulation and was implemented by using the relational database management system MySQL and an ontology-based data structure.

**Abbreviations:** CoryneRegNet

**Resource Type:** data or information resource, database

**Defining Citation:** [PMID:22080556](#), [PMID:19498379](#), [PMID:18426593](#), [PMID:17986320](#), [PMID:17229482](#), [PMID:16478536](#)

**Keywords:** gene, regulatory network, transcription factor, interaction, cis-regulatory element, bio.tools

**Availability:** Free, Freely available

**Resource Name:** CoryneRegNet

**Resource ID:** SCR\_002255

**Alternate IDs:** biotools:coryneregnet, nif-0000-02689, OMICS\_01858

**Alternate URLs:** <https://bio.tools/coryneregnet>

**Record Creation Time:** 20220129T080212+0000

**Record Last Update:** 20260804T043150+0000

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## Ratings and Alerts

No rating or validation information has been found for CoryneRegNet.

No alerts have been found for CoryneRegNet.

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## Data and Source Information

**Source:** [SciCrunch Registry](#)

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## Usage and Citation Metrics

We found 17 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [ASWG](#) .

Yu C, et al. (2025) Elucidating the Mechanism of Temporal Adaptation to Hydrogen Peroxide-Induced Oxidative Stress in *Corynebacterium glutamicum*. *Microbial biotechnology*, 18(6), e70170.

Parise D, et al. (2021) On the Consistency between Gene Expression and the Gene Regulatory Network of *Corynebacterium glutamicum*. *Network and systems medicine*, 4(1), 51.

Graf M, et al. (2019) Continuous Adaptive Evolution of a Fast-Growing *Corynebacterium glutamicum* Strain Independent of Protocatechuate. *Frontiers in microbiology*, 10, 1648.

Haas T, et al. (2019) Identifying the Growth Modulon of *Corynebacterium glutamicum*. *Frontiers in microbiology*, 10, 974.

Ibraim IC, et al. (2019) Transcriptome profile of *Corynebacterium pseudotuberculosis* in response to iron limitation. *BMC genomics*, 20(1), 663.

Ko YJ, et al. (2018) Biosynthesis of organic photosensitizer Zn-porphyrin by diphtheria toxin repressor (DtxR)-mediated global upregulation of engineered heme biosynthesis pathway in *Corynebacterium glutamicum*. *Scientific reports*, 8(1), 14460.

Dostálová H, et al. (2018) Overlap of Promoter Recognition Specificity of Stress Response Sigma Factors SigD and SigH in *Corynebacterium glutamicum* ATCC 13032. *Frontiers in microbiology*, 9, 3287.

Lee HN, et al. (2018) *Corynebacterium* Cell Factory Design and Culture Process Optimization for Muconic Acid Biosynthesis. *Scientific reports*, 8(1), 18041.

Catarina Teodoro Castro B, et al. (2018) UvrB protein of *Corynebacterium pseudotuberculosis* complements the phenotype of knockout *Escherichia coli* and recognizes DNA damage caused by UV radiation but not 8-oxoguanine in vitro. *Gene*, 639, 34.

- Zhang H, et al. (2018) Understanding the high L-valine production in *Corynebacterium glutamicum* VWB-1 using transcriptomics and proteomics. *Scientific reports*, 8(1), 3632.
- O'Neill PK, et al. (2016) Parametric bootstrapping for biological sequence motifs. *BMC bioinformatics*, 17(1), 406.
- Lubitz D, et al. (2016) Ciprofloxacin triggered glutamate production by *Corynebacterium glutamicum*. *BMC microbiology*, 16(1), 235.
- Taniguchi H, et al. (2015) Exploring the role of sigma factor gene expression on production by *Corynebacterium glutamicum*: sigma factor H and FMN as example. *Frontiers in microbiology*, 6, 740.
- Rees MA, et al. (2015) Changes in protein abundance are observed in bacterial isolates from a natural host. *Frontiers in cellular and infection microbiology*, 5, 71.
- Heider SA, et al. (2012) Carotenoid biosynthesis and overproduction in *Corynebacterium glutamicum*. *BMC microbiology*, 12, 198.
- Pacheco LG, et al. (2012) A Role for Sigma Factor  $\sigma^E$  in *Corynebacterium pseudotuberculosis* Resistance to Nitric Oxide/Peroxide Stress. *Frontiers in microbiology*, 3, 126.
- Baumbach J, et al. (2007) CoryneRegNet 4.0 - A reference database for corynebacterial gene regulatory networks. *BMC bioinformatics*, 8, 429.