

# Resource Summary Report

Generated by [RRID](#) on Aug 17, 2026

## pULTRA-CNF

RRID:Addgene\_48215

Type: Plasmid

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### Proper Citation

RRID:Addgene\_48215

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### Plasmid Information

**URL:** <http://www.addgene.org/48215>

**Proper Citation:** RRID:Addgene\_48215

**Insert Name:** polyspecific MJ tyrosyl synthetase

**Organism:** M. jannaschii

**Bacterial Resistance:** Spectinomycin

**Defining Citation:** [PMID:17061854](#)

**Vector Backbone Description:** Backbone Marker:Schultz lab; Vector Backbone:pULTRA; Vector Types:Bacterial Expression; Bacterial Resistance:Spectinomycin

**Comments:** This plasmid was also used in Chatterjee et al Biochemistry. 2013 Feb 27. PMID: 23379331

**Plasmid Name:** pULTRA-CNF

**Relevant Mutation:** Y32L, L65V, F108W, Q109M, D158G, I159A

**Record Creation Time:** 20220422T222248+0000

**Record Last Update:** 20260815T081548+0000

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### Ratings and Alerts

No rating or validation information has been found for pULTRA-CNF.

No alerts have been found for pULTRA-CNF.

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### Data and Source Information

## Usage and Citation Metrics

We found 15 mentions in open access literature.

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

Nakamura J, et al. (2025) Development of programmable RNA imaging with RNA-guided GFP via click chemistry. *Nucleic acids research*, 53(20).

Zhang Q, et al. (2025) Integrating protein language models and automatic biofoundry for enhanced protein evolution. *Nature communications*, 16(1), 1553.

Mukhopadhyay A, et al. (2024) Two-substrate enzyme engineering using small libraries that combine the substrate preferences from two different variant lineages. *Scientific reports*, 14(1), 1287.

Wang Y, et al. (2023) Noncanonical amino acids as doubly bio-orthogonal handles for one-pot preparation of protein multiconjugates. *Nature communications*, 14(1), 974.

Bridge T, et al. (2023) Site-specific encoding of photoactivity and photoreactivity into antibody fragments. *Nature chemical biology*, 19(6), 740.

Liu K, et al. (2023) An evolved pyrrolysyl-tRNA synthetase with polysubstrate specificity expands the toolbox for engineering enzymes with incorporation of noncanonical amino acids. *Bioresources and bioprocessing*, 10(1), 92.

Ling X, et al. (2022) Efficient generation of locus-specific human CAR-T cells with CRISPR/cCas12a. *STAR protocols*, 3(2), 101321.

O'Leary TR, et al. (2022) Chemical editing of proteoglycan architecture. *Nature chemical biology*, 18(6), 634.

Teodori L, et al. (2022) Site-specific nanobody-oligonucleotide conjugation for super-resolution imaging. *Journal of biological methods*, 9(1), e159.

Kean KM, et al. (2022) Systematic Variation of Both the Aromatic Cage and Dialkyllysine via GCE-SAR Reveal Mechanistic Insights in CBX5 Reader Protein Binding. *Journal of medicinal chemistry*, 65(3), 2646.

Pan X, et al. (2021) Enhancement of Activity and Thermostability of Keratinase From *Pseudomonas aeruginosa* CCTCC AB2013184 by Directed Evolution With Noncanonical Amino Acids. *Frontiers in bioengineering and biotechnology*, 9, 770907.

Yi H, et al. (2021) Comparative Analyses of the Transcriptome and Proteome of *Escherichia coli* C321.???A and Further Improving Its Noncanonical Amino Acids Containing Protein Expression Ability by Integration of T7 RNA Polymerase. *Frontiers in microbiology*, 12, 744284.

Yi D, et al. (2020) Enhancement of keratin-degradation ability of the keratinase KerBL from *Bacillus licheniformis* WHU by proximity-triggered chemical crosslinking. *International journal of biological macromolecules*, 163, 1458.

Vincent RM, et al. (2019) Measuring Amber Initiator tRNA Orthogonality in a Genomically Recoded Organism. *ACS synthetic biology*, 8(4), 675.

Bard JAM, et al. (2019) The 26S Proteasome Utilizes a Kinetic Gateway to Prioritize Substrate Degradation. *Cell*, 177(2), 286.