

PRODUCT INFORMATION

Haloferax volcanii insertion mutant library

Cat. No. D030101

Format: 100 µl

Concentration: $\geq 2.8 \times 10^5$ CFU/ml

Description

The library contains *Haloferax volcanii* H295 tagged with a TrpA-cat-Mu transposon in a random position and with a full-genome coverage (1). The transposon contains selectable marker genes *TrpA* for *Hfx. volcanii* and *cat* for *E. coli*.

Risk group

Biosafety level 1 (BSL1). Classification has been done according to the classifications outlined by the Gene Technology Board of Finland.

Storage conditions

Store at -80°C.

Storage buffer

Hv-YPC (0.5% yeast extract, 0.1% peptone, 0.1% casamino acids, 18 % saltwater) with the addition of 20 % glycerol and 6 % salt water

Cultivation conditions

1. To select for the Trp marker, plate suitable amounts onto Hv-Ca agar plates with added thiamine, biotin, and uracil (final conc. 50 µg/ml).
2. Culture plates at 45°C for 7 days (put the plates into a plastic bag to reduce drying).

Culture medium recipes

Casamino acids media with agar (Hv-Ca agar)

| | |
|-----------------|--------|
| Agar | 5 g |
| 30 % SW | 200 ml |
| 10x Ca | 33 ml |
| Distilled water | 100 ml |

After autoclaving and cooling to ~57°C, add

| | |
|---------------------------|--------|
| 0.5 M CaCl ₂ | 2 ml |
| Thiamine & Biotin | 300 µl |
| Uracil (50 mg/ml in DMSO) | 340 µl |

Pour thick plates (i.e. 9 plates per 333 ml)



10x Casamino acids (Ca)

| | |
|-----------------|--------|
| Casamino acids | 8.5 g |
| 1 M KOH | 4 ml |
| Distilled water | 170 ml |

Salt Water (30% SW)

| | |
|---|---------|
| NaCl | 240 g |
| MgCl ₂ ·6H ₂ O | 30 g |
| MgSO ₄ ·7H ₂ O | 35 g |
| KCl | 7 g |
| 1M TrisCl, pH 7.5 | 5 ml |
| 1M CaCl ₂ ·2H ₂ O | 5 ml |
| Distilled water | 1000 ml |

Adjust the pH, if necessary, up to 7.5 with 1M Tris base.

Thiamine & Biotin

| | |
|--------------------|--------|
| Thiamine (1 mg/ml) | 9.6 ml |
| Biotin (1 mg/ml) | 1.2 ml |

For more detailed information on preparing the culture media we recommend following the protocols described in Halohandbook.

REFERENCES

Kiljunen S, Pajunen MI, Dilks K, Storf S, Pohlschroder M, Savilahti H. Generation of comprehensive transposon insertion mutant library for the model archaeon, *Haloferax volcanii*, and its use for gene discovery. *BMC Biol.* 2014 Dec 9;12(1):103. PMID: 25488358.

Dyall-Smith M: The Halohandbook. [<http://www.haloarchaea.com/resources/halohandbook/>]



DOMUS
BIOTECHNOLOGIES

Citation

Please cite the product in the following manner:

Haloferax volcanii insertion mutant library (Domus Biotechnologies)

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Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Restrictions

There are no known Nagoya Protocol restrictions for this strain.

Please contact us for more information

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