

Preview

You are previewing a new record version that has not yet been published.

[← Back to edit](#)

Published August 26, 2024 | Version 2.0

[Model](#) [Open](#)

METL models

Gelman, Sam¹ ; Romero, Philip¹ ; Gitter, Anthony¹

[Show affiliations](#)

This repository contains pretrained source and target METL models. The [metl-pretrained](#) GitHub repository is used to load and run these models, and its readme describes each of the model files.


Version 2.0 added 36 finetuned METL-Local and METL-Global target models.

Files

Files (2.3 GB)
FT-METL-G-20M-1D-DLG4_2022-ABUNDANCE-4Rh3WCbG.pt md5:b9af0e77810e65920170a3dfdc3a03b6
75.8 MB
Download
FT-METL-G-20M-1D-DLG4_2022-BINDING-4xbuC5y7.pt md5:16c2f802c6f48ae0d1b475acff629ee4
75.8 MB
Download
FT-METL-G-20M-1D-GB1-dAndZfJ4.pt

md5:2cdb749f219d7b4f12024428696bdd9d ⓘ

75.8 MB

 Download

[FT-METL-G-20M-1D-GFP-PeT2D92j.pt](#)

md5:f98d265745cc03cfee50009055be9faf ⓘ

75.8 MB

 Download

[FT-METL-G-20M-1D-GRB2-ABUNDANCE-HenDpDWe.pt](#)

md5:e359cb55df9a4f6e8de487890fd81e66 ⓘ


75.8 MB

 Download

[FT-METL-G-20M-1D-GRB2-BINDING-cvnycE5Q.pt](#)

md5:f3d4b3d63a48d93bb90123d1b604557d ⓘ

75.8 MB

 Download

[FT-METL-G-20M-1D-Pab1-ho54gxzv.pt](#)

md5:ae2d69dd7c96ddf09e995f057591ffb2 ⓘ

75.8 MB

 Download

[FT-METL-G-20M-1D-TEM-1-ELL4GGQq.pt](#)

md5:48522902521f56564a870c0615411560 ⓘ

75.8 MB

 Download

FT-METL-G-20M-1D-Ube4b-BAWw23vW.pt

md5:54aabf6e715d4ad6b4f7978274bc748f ?

75.8 MB

 Download

FT-METL-G-20M-3D-DLG4_2022-ABUNDANCE-RBtqxzvu.pt

md5:0c1c9e8f3108c9c99e631ea8429ddccd ?

75.8 MB

 Download

FT-METL-G-20M-3D-DLG4_2022-BINDING-BuvxgE2x.pt

md5:c3c08b89926cea5da442792d1ed10c73 ?

75.8 MB

 Download

FT-METL-G-20M-3D-GB1-9vSB3DRM.pt

md5:4abbe5b9012a97847fef9112c5d6ade ?

75.8 MB

 Download

FT-METL-G-20M-3D-GFP-6JBzHpkQ.pt

md5:efe1ace2e0e4510ba25ee224c80a2790 ?

75.8 MB

 Download

FT-METL-G-20M-3D-GRB2-ABUNDANCE-dDoCCvfr.pt

md5:c0cb31310349ebd7028499d04a2528d5 ?


75.8 MB

 Download


[FT-METL-G-20M-3D-GRB2-BINDING-jYesS9Ki.pt](#)

md5:44919d5fc4a7db10ffcf7d94016da7d 

75.8 MB

 Download

[FT-METL-G-20M-3D-Pab1-jhbL2FeB.pt](#)

md5:a689c84e8fd4aeaac9009298e9cb42ea 

75.8 MB

 Download

[FT-METL-G-20M-3D-TEM-1-K6BjsWXm.pt](#)

md5:9de26ecb1b2bbcf94268298a460b1375 


75.8 MB

 Download

[FT-METL-G-20M-3D-Ube4b-G9piq6WH.pt](#)

md5:7212bb86881333d0ead99722b56086df 


75.8 MB

 Download

[FT-METL-L-1D-DLG4_2022-ABUNDANCE-RMFA6dnX.pt](#)

md5:a887648247c90fee7357515f46c41a90 

9.8 MB

 Download

[FT-METL-L-1D-DLG4_2022-BINDING-YdzBYWHs.pt](#)

md5:0dd6ad783afba0d0f691eeeab49529b5 

9.8 MB

 Download

[FT-METL-L-1D-GB1-Pgcseywk.pt](#)

md5:0ffc2f377098ad444a0c241352f3d62b 


9.8 MB

 Download

[FT-METL-L-1D-GFP-HaUuRwfE.pt](#)

md5:e2298debec18d68fc5907e5e81c76c5d 

9.8 MB

 Download

[FT-METL-L-1D-GRB2-ABUNDANCE-VNpi9Zjt.pt](#)

md5:7169ed96b2b6559184bab8d8166e896a 

9.8 MB

 Download

[FT-METL-L-1D-GRB2-BINDING-Z59BhUaE.pt](#)

md5:dafe6f6bb072d65ede6354ad660f0521 

9.8 MB

 Download

[FT-METL-L-1D-Pab1-TdjCzoQQ.pt](#)

md5:e88a91a568848779c15010a25b333188 

9.8 MB

 Download

[FT-METL-L-1D-TEM-1-64ncFxBR.pt](#)

md5:dcb6dd6eff95dc2a2af015f2cb8bec5f ?


9.8 MB

 Download

[FT-METL-L-1D-Ube4b-e9uhhnAv.pt](#)

md5:4ce23fba05b25eec1387ff1f4998cf42 ?

9.8 MB

 Download

[FT-METL-L-2M-1D-GFP-YoQkzoLD.pt](#)

md5:200b53c2cb47f68b0464410519fb360c ?


9.8 MB

 Download

[FT-METL-L-2M-3D-GFP-PEkeRuxb.pt](#)

md5:ad122a773fbd40debc913c5a2cd03bdc ?

9.8 MB

 Download

[FT-METL-L-3D-DLG4_2022-ABUNDANCE-V3uTtXVe.pt](#)

md5:bc8b72e1bcbedab613c075af70176562 ?

9.8 MB

 Download


[FT-METL-L-3D-DLG4_2022-BINDING-iu6ZahPw.pt](#)

md5:de893407c9595a753f725b3c6438040c ?

9.8 MB

 Download

FT-METL-L-3D-GB1-UvMMdsq4.pt

md5:09da8034e08679dce5be07c44bfa090c 

9.8 MB

 Download

FT-METL-L-3D-GFP-LWEY95Yb.pt

md5:22348747b4bc374608c8f355de3214a5 

9.8 MB

 Download

FT-METL-L-3D-GRB2-ABUNDANCE-PqBMjXkA.pt

md5:e06ef6b38df166a06f159cf1f06411e9 

9.8 MB

 Download


FT-METL-L-3D-GRB2-BINDING-VwcRN6UB.pt

md5:aa0c6e0f2687f6038d8cd0ae1a88e089 

9.8 MB

 Download

FT-METL-L-3D-Pab1-5SjoLx3y.pt

md5:0c31556590497bb363044b7bab420d85 

9.8 MB

 Download

FT-METL-L-3D-TEM-1-PncvgiJU.pt

md5:7ce7051cb4df088241afa978b68c3068 


9.8 MB

 Download

[FT-METL-L-3D-Ube4b-NfbZL7jK.pt](#)

md5:cf14f284b0c89cb667c4229d36bab4aa 


9.8 MB

 Download

[METL-BIND-2M-3D-GB1-BINDING-Bo5wn2SG.pt](#)

md5:3922a44fbe5e2fe1dfbc61008adec86e 

9.9 MB

 Download

[METL-BIND-2M-3D-GB1-STANDARD-K6mw24Rg.pt](#)

md5:548cbb2b776317031988c0c20a787838 

9.9 MB

 Download

[METL-G-20M-1D-D72M9aEp.pt](#)

md5:bb0cde3ab6b65272450cc7624ae223e7 


77.0 MB

 Download

[METL-G-20M-3D-Nr9zCKpR.pt](#)

md5:3d1a0ef982d9106fc5ce736a6e174ca3 

76.9 MB

 Download

[METL-G-50M-1D-auKdzzwX.pt](#)

md5:e6844c08079e8c28168fa7bc3f09415c 

203.2 MB

 Download


[METL-G-50M-3D-6PSAzdfv.pt](#)

md5:6f43f638294b2cc14c1f66928f25feff 


203.1 MB

 Download

[METL-L-2M-1D-DLG4_2022-8iFoiYw2.pt](#)

md5:157886954216ef1a25ff4a9981637f3f 

9.9 MB

 Download


[METL-L-2M-1D-GB1-DMfkjVzT.pt](#)

md5:f34ce0c73e642524815d94c470e96d02 

9.9 MB

 Download

[METL-L-2M-1D-GFP-8gMPQJy4.pt](#)

md5:3ac1078b02c20e1d7704ba75647c02b2 

9.9 MB

 Download

[METL-L-2M-1D-GRB2-kS3rUS7h.pt](#)

md5:8c03a3466f2521d1687d8ffec7ed1d62 


9.9 MB

 Download

[METL-L-2M-1D-Pab1-UKebCQGz.pt](#)

md5:1031b4df750b75e9ac8929c6efb45168 ?

9.9 MB

 Download

[METL-L-2M-1D-TEM-1-PREhfC22.pt](#)

md5:d136ab0411ef1ee73f9699dc716a13df ?

9.9 MB

 Download

[METL-L-2M-1D-Ube4b-HscFFkAb.pt](#)

md5:a81d85199612902253afea769ec9bbfd ?


9.9 MB

 Download

[METL-L-2M-3D-DLG4_2022-kt5DdWTa.pt](#)

md5:8e3e6d74576ec298c7847af1f5365bd2 ?

9.9 MB

 Download

[METL-L-2M-3D-GB1-epegcFiH.pt](#)

md5:ce24dec175f32aee8c23104c6be8459f ?

9.9 MB

 Download

[METL-L-2M-3D-GFP-Hr4GNHws.pt](#)

md5:3f91d250dc889820d8dee29b0d154564 ?


9.9 MB

 Download

METL-L-2M-3D-GRB2-X7w83g6S.pt

md5:5a31a952f6645dd1d1e190d94be19a0d ⓘ

9.9 MB

 Download

METL-L-2M-3D-Pab1-2rr8V4th.pt

md5:146dcb44ce16e4ff54103300d5b91adc ⓘ

9.9 MB

 Download

METL-L-2M-3D-TEM-1-9ASvszux.pt

md5:beb1bcf9b2323b18b6e9cf1fef3241f9 ⓘ

9.9 MB

 Download

METL-L-2M-3D-Ube4b-H48oiNZN.pt

md5:9c8ce7a2c15425ed69a470f21e828dcc ⓘ

9.9 MB

 Download

Additional details

Related works

Is supplement to

Preprint: [10.1101/2024.03.15.585128](https://doi.org/10.1101/2024.03.15.585128) (DOI)

Software: <https://github.com/gitter-lab/metl> (URL)

Software: <https://github.com/gitter-lab/metl-pretrained> (URL)

Funding

Collaborative Research: MFB: Integrating Deep Learning and High-throughput Experimentation to Rapidly Navigate Protein Fitness Landscapes for Non-native Enzyme Catalysis 2226383

National Science Foundation

Collaborative Research: MFB: Integrating Deep Learning and High-throughput Experimentation to Rapidly Navigate Protein Fitness Landscapes for Non-native Enzyme Catalysis 2226451

National Science Foundation

A Machine Learning Platform for Adaptive Chemical Screening R01GM135631

National Institutes of Health

Data-driven analysis of protein structure, function, and regulation R35GM119854

National Institutes of Health

References

- Sam Gelman, Bryce Johnson, Chase Freschlin, Sameer D'Costa, Anthony Gitter, Philip A Romero. Biophysics-based protein language models for protein engineering. bioRxiv, 2024. doi:10.1101/2024.03.15.585128

Versions

Preview

Only published versions are displayed.

Version 1.0

10.5281/zenodo.11051645

Apr 23, 2024

...

Version 2.0

10.5281/zenodo.13377502

Aug 26, 2024

Cite all versions? You can cite all versions by using the DOI [10.5281/zenodo.11051644](https://doi.org/10.5281/zenodo.11051644). This DOI represents all versions, and will always resolve to the latest one. [Read more](#).

External resources

Available in

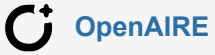


Github



Github

Indexed in



OpenAIRE

Communities

This record is not included in any communities yet.

Details

DOI

DOI [10.5281/zenodo.13377502](https://doi.org/10.5281/zenodo.13377502)

Resource type

Model

Publisher

Zenodo

Rights



Creative Commons Attribution 4.0 International

Citation

Gelman, S., Romero, P., & Gitter, A. (2024). METL models (2.0). Zenodo. <https://doi.org/10.5281/zenodo.13377502>

Style

APA



Export

JSON



Export

Technical metadata

Created August 27, 2024

Modified August 27, 2024



Jump up