

On Pre-trained Language Models for Antibody

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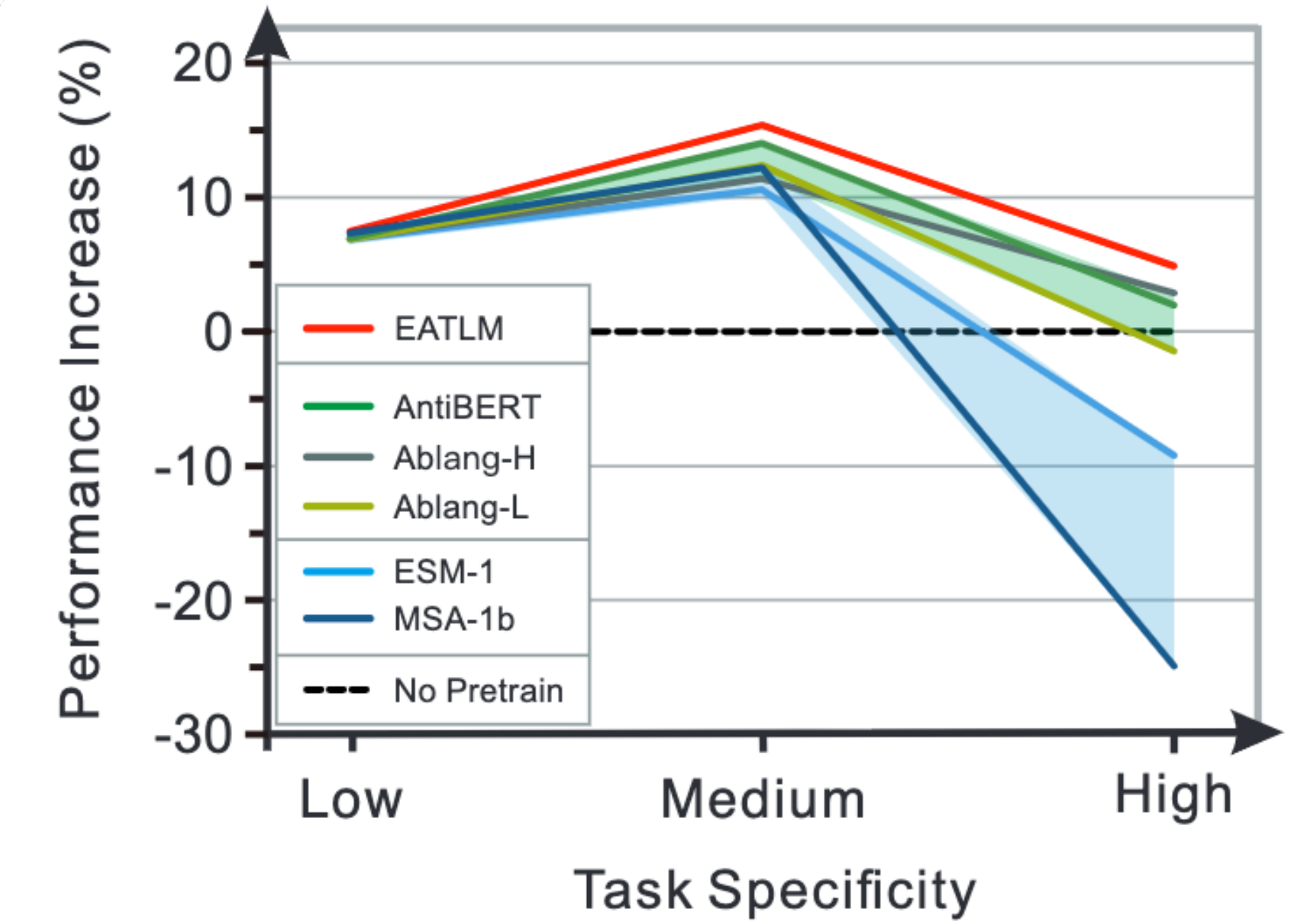
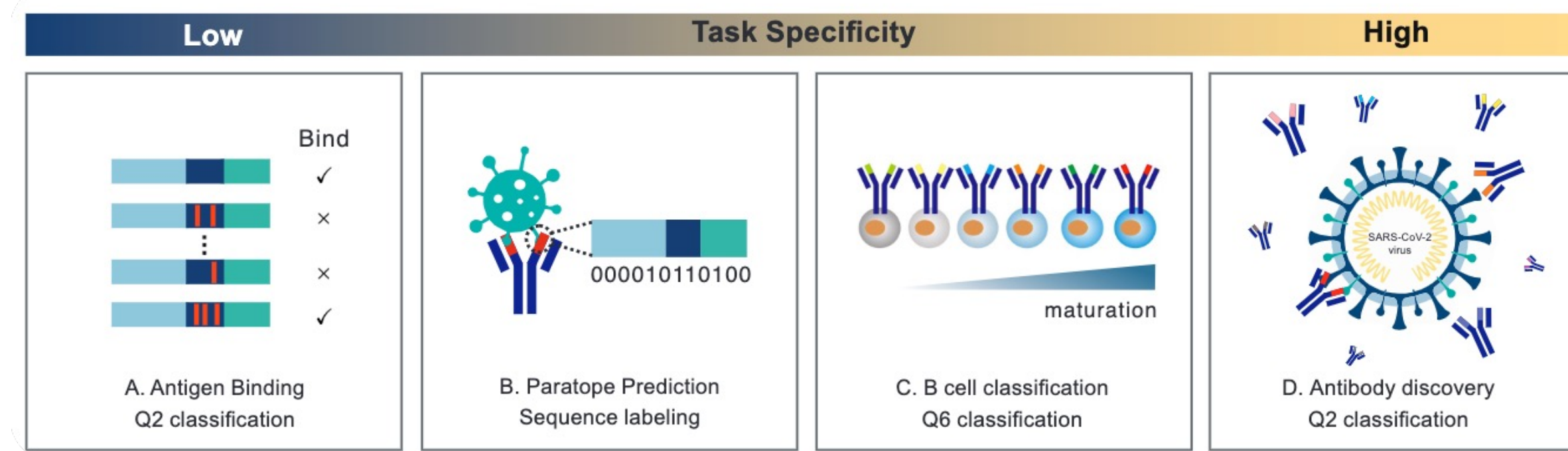
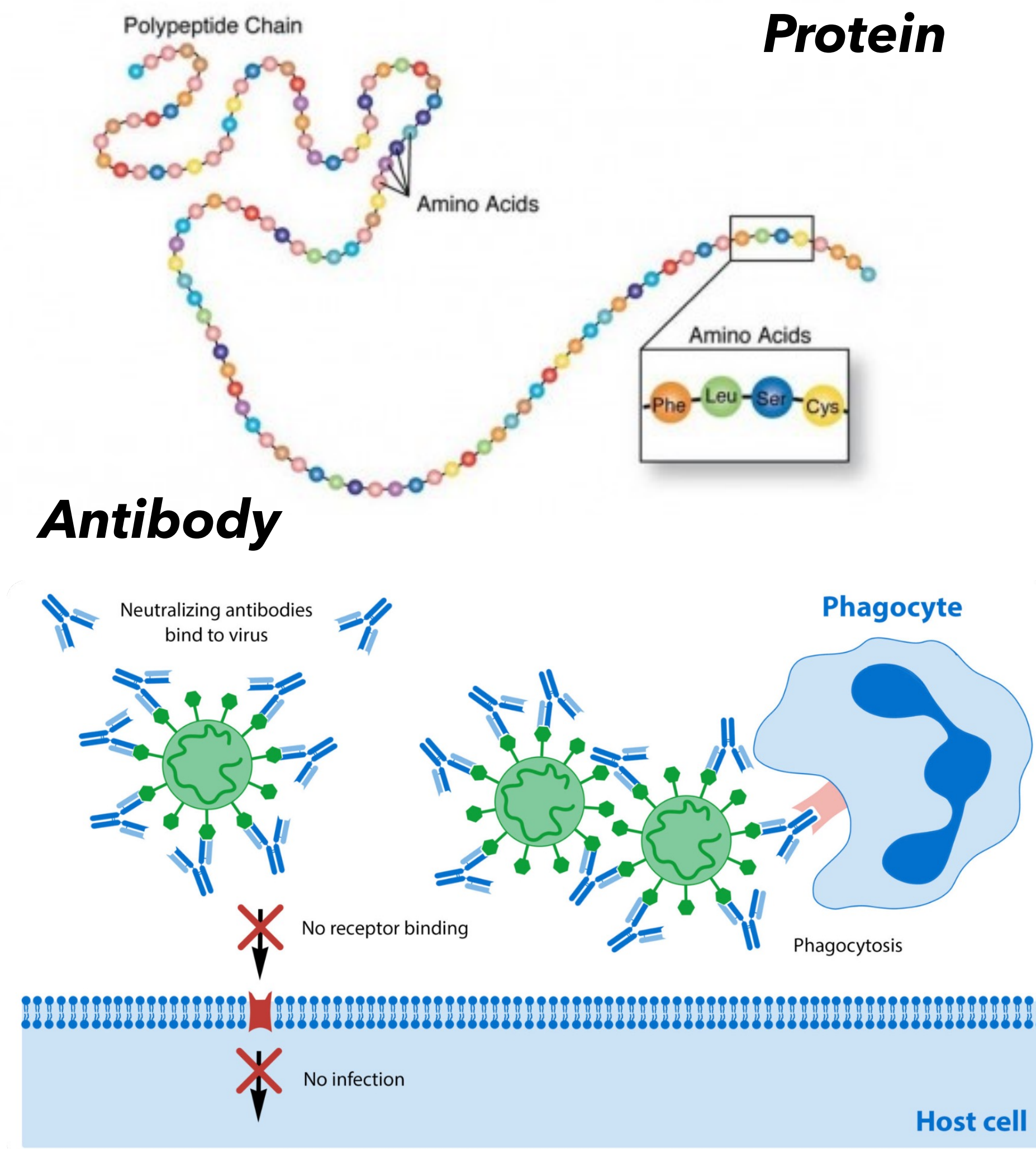
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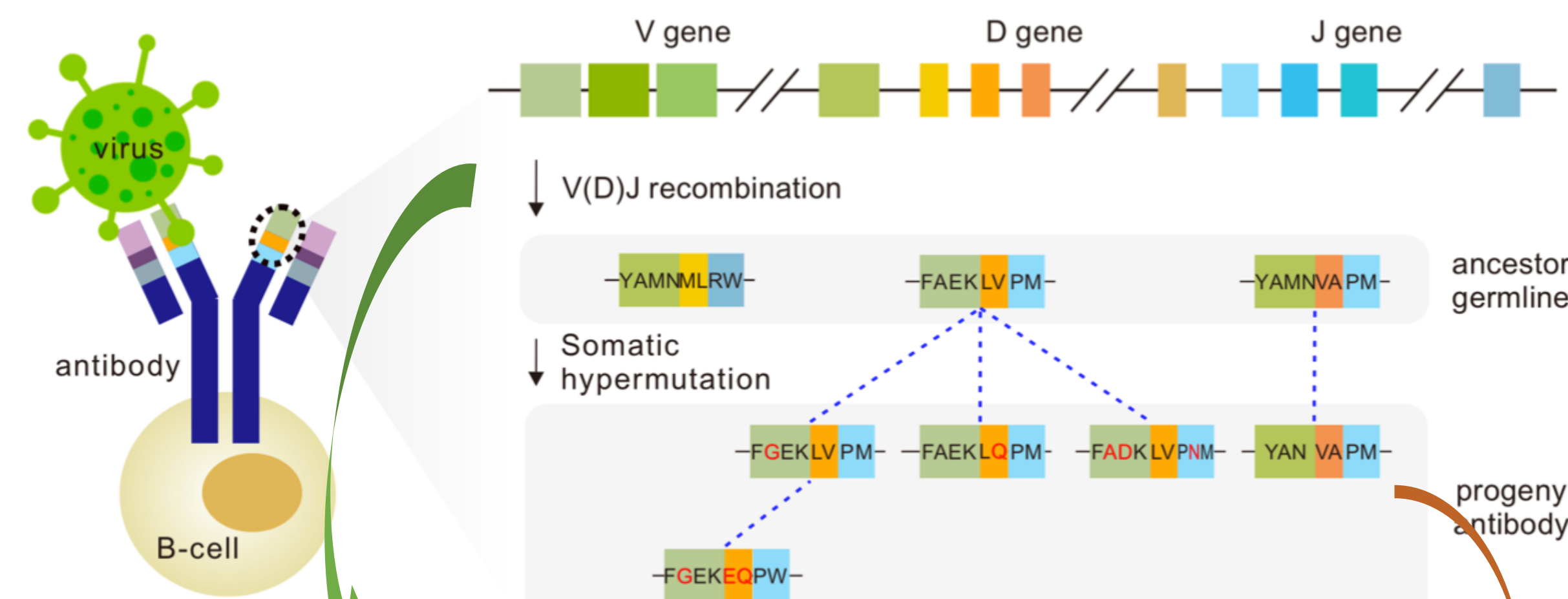
Protein & Antibody

Antibody Understanding Task (ATUE)

Experiment

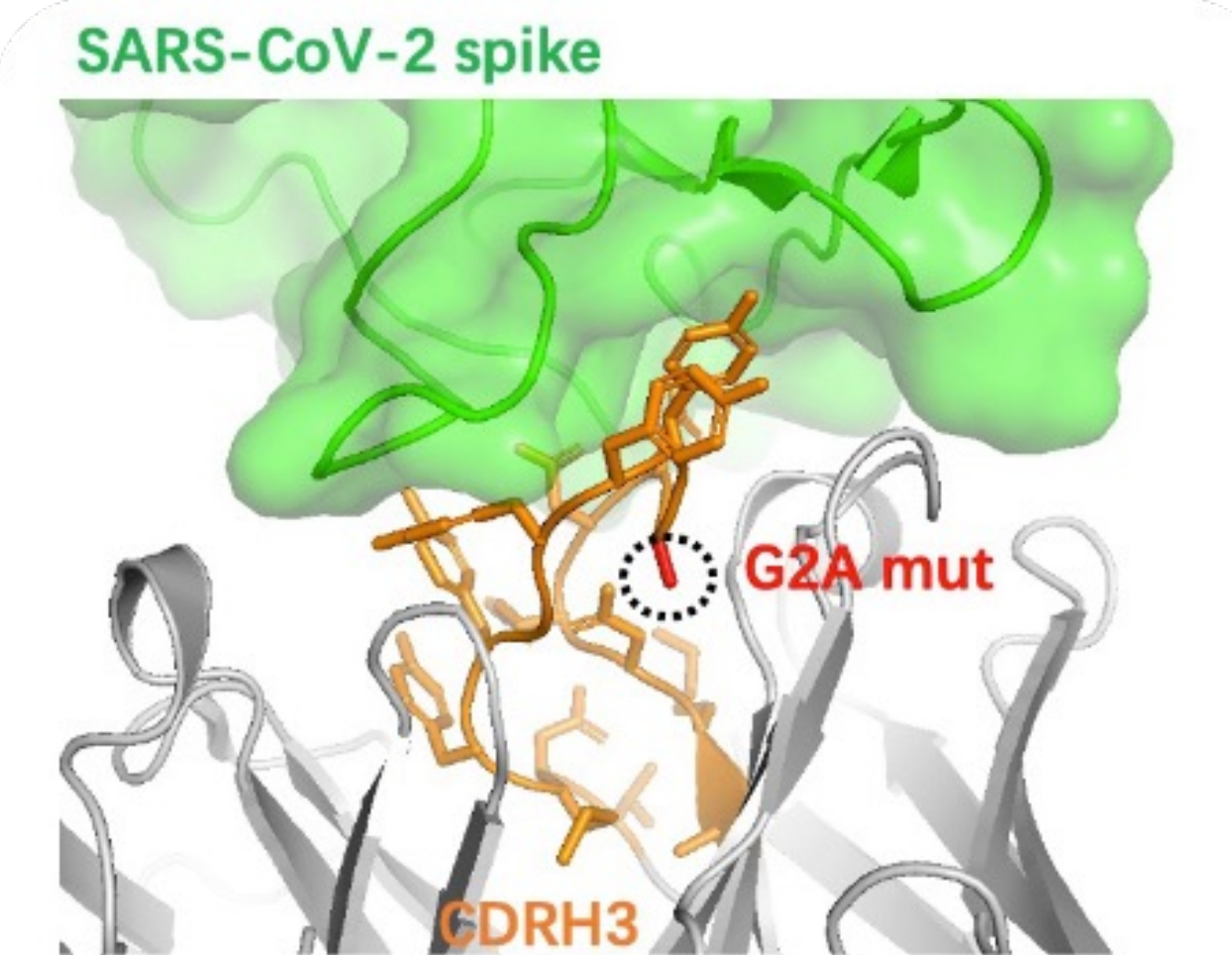


Evolution-aware AntIbody Language Model (EATLM)



PPLMs can only solve low specificity tasks
PALMs are not good antibody discoverers
EATLM benefits from the evolution process

Promising Antibody Binders for SARS-CoV-2



No.3
Pred binder: AKDQDDAYYYYYYMDV
True binder (7N62): AKDQDDGYYYYYYMDV

Opposite Evolution Mechanism

