

Hetero_cell_isab

2025.03.04 - Model Example Architecture

Model architecture:

```
HeteroCell(  
  (gene_embedding): Embedding(6607, 64)  
  (reaction_embedding): Embedding(4881, 64)  
  (metabolite_embedding): Embedding(2534, 64)  
  (preprocessor): PreProcessor(  
    (mlp): Sequential(  
      (0): Linear(in_features=64, out_features=64, bias=True)  
      (1): LayerNorm((64,), eps=1e-05, elementwise_affine=True)  
      (2): ReLU()  
      (3): Dropout(p=0.0, inplace=False)  
      (4): Linear(in_features=64, out_features=64, bias=True)  
      (5): LayerNorm((64,), eps=1e-05, elementwise_affine=True)  
      (6): ReLU()  
      (7): Dropout(p=0.0, inplace=False)  
    )  
  )  
  (convs): ModuleList(  
    (0-2): 3 x HeteroConv(num_relations=4)  
  )  
  (global_aggregator): SortedSetTransformerAggregation(  
    (aggregator): SetTransformerAggregation()  
    (proj): Identity()  
  )  
  (prediction_head): Sequential(  
    (0): Linear(in_features=64, out_features=64, bias=True)  
    (1): LayerNorm((64,), eps=1e-05, elementwise_affine=True)  
    (2): ReLU()  
    (3): Dropout(p=0.0, inplace=False)  
    (4): Linear(in_features=64, out_features=64, bias=True)  
    (5): LayerNorm((64,), eps=1e-05, elementwise_affine=True)  
    (6): ReLU()  
    (7): Dropout(p=0.0, inplace=False)  
    (8): Linear(in_features=64, out_features=64, bias=True)  
    (9): LayerNorm((64,), eps=1e-05, elementwise_affine=True)  
    (10): ReLU()  
    (11): Dropout(p=0.0, inplace=False)  
    (12): Linear(in_features=64, out_features=2, bias=True)  
  )  
)  
)  
Parameter count: 1167493
```

2025.03.04 - Model Mermaid

