

| Tasks | Prediction Head(Hits@10) | | | | Prediction Tail(Hits@10) | | | |
|-------------------|--------------------------|-------------|-------------|-------------|--------------------------|-------------|-------------|-------------|
| Relation Category | 1-to-1 | 1-to-N | N-to-1 | N-to-N | 1-to-1 | 1-to-N | N-to-1 | N-to-N |
| TransE(baseline) | 70.4 | 68.0 | 39.3 | 51.7 | 71.7 | 38.2 | 64.8 | 53.5 |
| NKGE(Single) | 85.2 | 94.2 | 54.0 | 73.0 | 81.5 | 60.9 | 95.2 | 74.6 |
| NKGE(Multi) | 85.2 | 96.9 | 57.9 | 79.7 | 82.3 | 64.1 | 95.8 | 83.7 |