

# Supplemental Data 02: Coverage summary (as of 2025-10-15; all computed locally in MetaDB, no federation)

	Total bioresources	Bioresources with $\geq 1$ NCBI Gene	Bioresources whose linked genes resolve to $\geq 1$ UniProt protein	Bioresources reaching $\geq 1$ ChEBI role	Bioresources with $\geq 1$ GO term
DNA material (e.g., <i>Homo sapiens</i> , <i>Mus musculus</i> ).	169,107	136,989 (81.0% = 136,989/169,107)	127,257 (75.3% = 127,257/169,107)	19,809 (11.7% = 19,809/169,107)	108,589 (64.2% = 108,589/169,107)
Plant DNA material ( <i>Arabidopsis thaliana</i> )	612,129	267,613 (43.7% = 267,613/612,129)	266,167 (43.5% = 266,167/612,129)	61,499 (10.0% = 61,499/612,129)	254,082 (41.5% = 254,082/612,129)

Notes. “Bioresources whose linked genes resolve to  $\geq 1$  UniProtKB protein” means: at least one gene attached to the resource could be resolved to a UniProtKB protein (gene -> protein). NCBI Gene IRIs are normalized across four accepted patterns before DISTINCT counting. External graphs (UniProtKB, Rhea, ChEBI, GO) are hosted locally in MetaDB; no SERVICE federation was used.

	NCBI Gene related to bioresources	UniProt protein related to bioresources	ChEBI role related to bioresources	GO term related to bioresources
DNA material	36,060	49,670	166(12.2% = 166/1364)	18,273(85.6% = 18,273/21,352)
Plant DNA material	27,841	54,982	163(12.0% = 163/1364)	6,459(30.3% = 6,459/21,352)

