

Comparison of Major Golgi Apparatus Isolation Kits

The Golgi apparatus is consisted of a series of flattened membrane vesicles. The major function of Golgi is to modify proteins for transportation. Modified proteins are transported out of Golgi in coated vesicles that bud off the trans-cellular membrane. It plays a critical role in protein synthesis and modification. There are limited selections of commercial kits for isolation of this important organelle.

Brand/manufacturer	Brand# 1	Invent Biotech
Product Name	Golgi Isolation Kit	Minute [™] Golgi Apparatus Enrichment Kit
Mechanism of Isolation	Density gradient centrifugation	Spin column-based -precipitation
Average sample size	Tissue (5 g)	Tissue (35 mg) Cells (30 million)
Number of buffers and reagents used	3	4
Buffer preparation prior to use	Required	Not required
Homogenizer	Required	Not required
Density gradient formation	Required	Not required
Ultracentrifugation	Required	Not required
Purity of Isolated Golgi	Enriched Golgi	Enriched cis-Golgi and secretory vesicles of trans-Golgi
Approximate Protocol Time	3.5h	2h