

**Table S5.**  
**Quantitation of Organelle Markers for Mitochondria, Lysosomes, and Endoplasmic Reticulum (ER) Reveals the High Purity of the Human Dense Core Secretory Vesicles**

| <b>Protein Marker</b>   | <b>Organelle</b>      | <b>Abundance*</b> | <b>#Peptides**</b> |
|-------------------------|-----------------------|-------------------|--------------------|
| Chromogranin A          | DCSV                  | 9.85              | 17                 |
| Chromogranin B          | DCSV                  | 5.63              | 29                 |
| Fumarate Hydratase      | Mitochondria (L)      | 0.04              | 3                  |
| Citrate Synthase        | Mitochondria (L)      | 0.01              | 5                  |
| Succinate Dehydrogenase | Mitochondria (IM)     | NM                | 2                  |
| Phosphoglycerate Kinase | Mitochondria (L)      | 0.24              | 3                  |
| NADH Dehydrogenase      | Mitochondria (IM)     | 0.50              | 1                  |
| VDAC1                   | Mitochondria (OM)     | 0.37              | 11                 |
| VDAC2                   | Mitochondria (OM)     | 0.13              | 2                  |
| Deoxyribonuclease       | Lysosome              | NO                | 0                  |
| Arylsulfatase           | Lysosome              | NO                | 0                  |
| Beta-glucuronidase      | Lysosome              | 0.02              | 2                  |
| LAMP-1                  | Lysosome              | NM                | 1                  |
| Calreticulin            | Endoplasmic Reticulum | 0.15              | 1                  |
| Calnexin                | Endoplasmic Reticulum | 0.08              | 3                  |
| Lactate Dehydrogenase   | Cytosol               | NM                | 0                  |

DCSV, dense core secretory vesicle; L, luminal; IM, inner membrane; OM, outer membrane;

NM, not measurable; NO, not observed in data. \*Abundance measured by NSAF x 10<sup>2</sup>.

\*\* #Peptides = number of peptides observed for proteins in data presented in this article.

\*\*\* These peptides are consistent with proteins known to be present in enriched organelle fractions [66].