

## GENEFLOW IMAC SuperSpin™ Tubes Information

- **Rapid Purification of Histidine-Tagged Proteins**
- **High protein binding capacity of up to 800µg**
- **Very low cost in comparison to similar products in the marketplace**
- **Simple optimization of the binding, washing and elution conditions**
- **Process up to 1.5ml sample volume**
- **High protein purity is achieved in a single step**



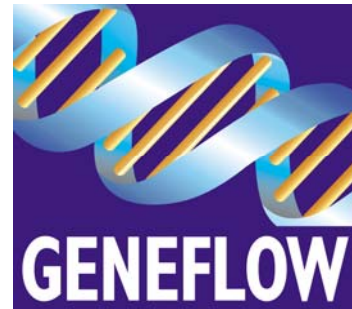
With a patented novel technology (patent pending), IMAC SuperSpin™ tube is supplied as an economical, single use disposable device that allows rapid purification and screening of histidine-tagged proteins.

The spin tube is filled with novel metal immobilised chromatography resin of small particles (20 – 50 µm). It gives very fast mass transfer rate of target proteins ensuring that a substantial quantity of protein can be captured in a short solid / liquid contact time. Four types of spin tubes are available as Ni SuperSpin™, Cu SuperSpin™, Co SuperSpin™ and Zn SuperSpin™ for fast screening of the best immobilised metal ion to a given target protein. It is a particularly powerful tool in applications such as small-scale purification, high-throughput screening and purification process optimization.

The fine IMAC particles are very stable and compatible with a variety of chemical reagents (eg denaturing reagents and reducing reagents)

### Characteristics and Compatibility

The IMAC resin supplied has the characteristics listed in Table 1. It is very stable and compatible with a variety of chemical reagents as listed in Table 2. The leakage of metal ion is negligible.



**Table 1**

**Characteristics of Ni SuperSpin™/Cu SuperSpin™/Co SuperSpin™/  
Zn SuperSpin™**

Tube material	Polypropylene
Medium	IMAC SuperSpin™
Particle size	20 – 50 µm
Packed volume	50 µl
Protein binding capacity	Depends on the type of proteins and binding conditions; >800ug*
Chemical compatibility	Stable in the commonly used buffers and denaturing reagents, avoid chelating reagents e.g. EDTA, EGTA and citrate, see Table 2 for details
Storage condition	4°C for the resin

\*Tested with nickel ion charged

**Table 2**

**Chemical compatibility\***

Chelating reagents	EDTA, EGTA	Up to 1 mM, but care should be taken with chelating reagents. It may be added to the samples rather than directly to the binding buffers
Denaturing reagents	GuHCl Urea	Up to 6 M Up to 8 M
Detergents	Triton X-100 Tween-20 NP-40 CHAPS	Up to 2% v/v Up to 2% v/v Up to 2% v/v Up to 1%

\*Tested with nickel ion charged

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