



## Fastback Ni Advance Resin Datasheet

Fastback Ni Advance Resin designed for faster purification for secreted proteins using culture media directly. Nickel ions are carefully loaded onto an agarose matrix via chelating coupled ligand to obtain a stable affinity matrix with a high binding capacity for histidine residues.

### Benefits

- Works in your protocol, regardless of sample origin whether eukaryotic (insect, HEK293 or CHO) and bacterial (*E. coli*).
- Great results faster with fewer steps than conventional workflow – no need to pre-treat sample, simply mix culture media with the resin in a batch bind mode or directly load on the column containing the resin.
- Keep your buffer in its preferred conditions as Fastback Ni Advance resin is resistant to EDTA (up to 20mM) and DTT (up to 20mM) for IMAC chromatography – Ni ions remain bound to ligand

### Specifications

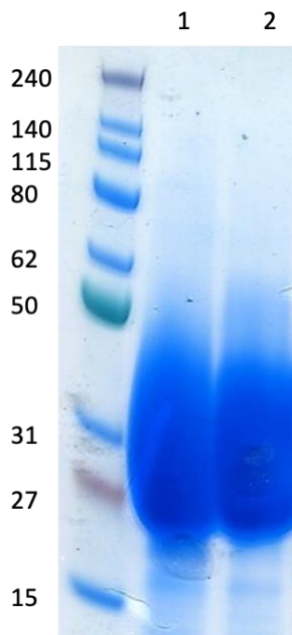
Specificity:	Polyhistidine tag
Matrix:	6% cross-linked Agarose
Coupled ligand:	Chelating ligand
Binding capacity:	80 mg/ml
Bead size:	90 µm
Metal Ion capacity (Cu, Ni)	>75 µmol/ml
Flow rate:	0.25-2 ml/min, max 6.0 ml/min
Maximum pressure:	45 psi
DTT stability (24 hours)	20 mM
EDTA stability (24 hours)	20 mM
Buffer compatibility:	Common aqueous buffers from pH 4-9
Shipping/delivery:	Ambient temperature
Storage:	Equilibration buffer at 2-8°C (short-term) 20% ethanol at 2-8°C (long-term)

**Compatibility:** Fastback Ni Advance is very stable and can resist the following conditions in most situations: Buffers at pH 4-9, 100% methanol, 100% ethanol, 8 M urea, 6 M guanidinium hydrochloride, 30% (v/v) acetonitrile, 20 mM DTT, 20 mM EDTA. Fastback Ni Advance is also stable at pH >9.0 and can be regenerated by alkaline solutions, such as sodium hydroxide.



## Performance data

Figure 1. Comparison between Protein Ark Ni Advance resin and GE Ni Excel Resin



Data provided by Qamar S at Cambridge Institute for Medical Research (CIMR), University of Cambridge, July 2019.

Figure 1. His- tagged Secreted Glycosylated Protein directly captured from 1litre of Expi293 culture medium with 5.0ml of each resin (diffused bands due to protein glycosylation). Protein marker used: Protein Ark Elite Pre-stained Protein Ladder (Cat#PAL-EPL-500).

Lane 1: GE Ni Excel Resin

Lane 2: Protein Ark Fastback Ni Advance Resin

## Ordering Information:

Product	Volume	Order Code
Fastback Ni Advance Resin (10 ml)	10 ml	Fastback-Ni-Adv-10
Fastback Ni Advance Resin (25 ml)	25 ml	Fastback-Ni-Adv-25
Fastback Ni Advance Resin (100 ml)	100 ml	Fastback-Ni-Adv-100