

# **HCPure**<sup>TM</sup>

Host Cell Protein Clearance Resin





### **TECHNOLOGY**

HCPure<sup>™</sup> is a HCP clearance chromatography adsorbent developed and manufactured exclusively by Astrea Bioseparations. Composed of proprietary multi-mode ligands attached to a beaded agarose support.

The adsorbent selectively binds host cell proteins, light chain IgG as well as high molecular weight aggregates from a variety of sources, including feedstock derived from CHO, HEK and *E. coli* cell cultures, to yield highly purified biological products.

HCPure host cell protein clearance adsorbent, chemical ligand crosslinked to a caustic resistant agarose bead, which can maintain a high-level chromatographic performance over many process cycles.



Eliminate process steps without reducing confidence in the purity of your product. Using a proprietary multi-mode ligand crosslinked to Astrea Bioseparations's PuraBead® support matrices, HCPure® host cell protein clearance adsorbent removes the need for an Ion Exchange step after the capture stage. The HCP Clearance adsorbent from Astrea Bioseparations offers the platform flexibility of traditional Ion Exchange without the need for dilution after capture using Protein A, allowing sample processing from multiple different starting materials whilst eliminating a source of error and potential process bottleneck.

HCPure clearance products are manufactured in a controlled environment according to an ISO 9001 accredited quality system aand are designed to be suitable for use in a manufacturing scale environment.

#### **Operational Flow Properties**

HCPure host cell protein clearance adsorbent is crosslinked to Astrea Bioseparations P6HF Purabead which enables the operation of large diameter process columns at high linear flow rates (up to greater than 600 cm/h).

#### **Key Features**

- · High specificity for host cell proteins
- Excellent flow properties
- Robust, long life adsorbent
- Sanitisable with NaOH allowing for multiple cycles
- High purity, chemically defined ligand structures
- Highly reproducible batch-to-batch manufacture
- Regulatory Support Files available

#### **Advantages**

- Eliminates the need for ion exchange, reducing process steps and improving time efficiency
- Eliminates the need to dilute salt concentration after protein A capture steps
- Create a robust purification platform that can be adjusted for variations in target analytes and upstream processes without having to requalify processes
- Durable and easy to pack PuraBead® P6HF base matrices
- Derivatised 90 µm PuraBead P6HF allows for ideal combination of fast flow and highly selective ligand density to achieve highly purified samples with minimal residence time
- Reusable for multiple process cycles
- Stable across a very wide pH range from pH 2.0 (short term) to pH 14.0

## **PRODUCT FORMATS**

#### **Bulk Manufacture & Supply**

Astrea Bioseparations supplies bulk adsorbents for developmental and regulated cGMP manufacturing applications in volumes sufficient to meet the requirements of the largest biomanufacturing processes.

Our HCPure™ host cell protein clearance adsorbent is manufactured in Astrea Bioseparations' controlled environment manufacturing facility under an accredited ISO 9001 quality system and regulatory support files are available.

#### **Ordering Information**

For small orders, please visit our webshop.

We also offer a range of larger pack sizes for supply of bulk resins into cGMP development and manufacturing scale processes.

#### **Adsorbent Gel Slurry**

Pack Size	Product Code
25 mL	3260-00025
100 mL	3260-00100
500 mL	3260-00500
1 L	3260-01000

Astrea Bioseparations also offer a range of pre-packed columns including 1 mL and 5 mL column kits and a range of other larger pre-packed column solutions.

#### **Pre-Packed Columns**

Code	Description	Pack Size
6650	HCP Clearance P6HF 1 mL Column Kit	4 x 1 mL columns
6651	HCP Clearance P6HF 5 mL Column Kit	4 x 5 mL columns
4520-3260	Robocolumns: 4520- 3260 (200 μL)	Row of 8 x 200 μL columns
4300-3260	Evolve®R: 4300-3260 (-00005 or -00050 depending on volume)	5 mL or 50 mL pre- packed columns





### +44 (0) 1223 433 800 | astreabioseparations.com

sales@astrea-bio.com | techsupport@astrea-bio.com | quality@astrea-bio.com

Global bases in North America, Canada and Cambridge UK HQ: Horizon Park, Barton Road, Comberton, Cambridge, CB23 7AJ, UK

