

Access CHT™ resin pre-packed in OPUS® Columns

OPUS® Pre-Packed Chromatography Columns



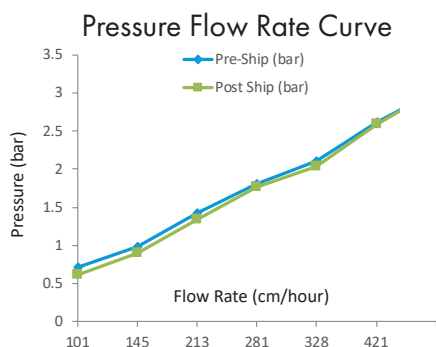
Ceramic hydroxyapatite (CHT™) resin offers unique selectivity during the purification of mAbs and recombinant proteins. OPUS® Columns can now be pre-packed with CHT™ resin and shipped world wide with excellent performance.

- Internal diameters from 5 - 45 cm
- Bed heights from 5 - 30 cm

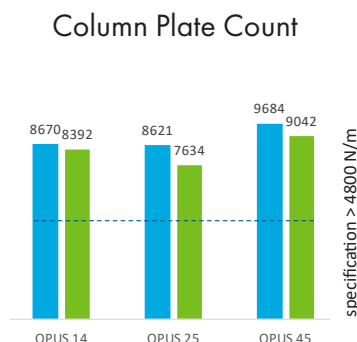
Performance maintained after shipping

OPUS® Columns pre-packed with CHT™ resin were evaluated pre- and post-shipping for plate count and asymmetry variance. The shipping qualification test was executed by a certified International Safe Transit Authority test facility.

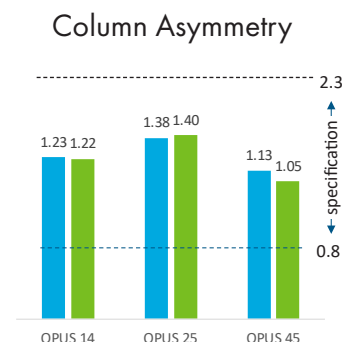
Shipping tests included high temperature (38° C) and high humidity for 36 hours, low temperature (4° C) for 36 hours, compression testing, 2 hours of random vibrational testing, 2 drop tests, and 4 incline impact tests.



The pressure flow rate curve of an OPUS® 14 (20 cm bh) packed with CHT™ resin was evaluated with a mobile phase of PBS and 1% CV of 2 M NaCl in PBS as the injection solution. Post-shipping values closely trended with pre-shipping values.



Average plate count and asymmetry variance post-shipping was within 8% and 3%, respectively, of the pre-shipping value. Absolute values were within the specification window.



Performance Specifications

Type	Asymmetry Range	Plate Count
Bio-Rad 40 μm types I and II	0.8 - 2.3	> 4800 N/m
Bio-Rad 80 μm types I and II	0.8 - 2.3	> 1800 N/m

All columns are tested with a mobile phase of PBS with 1% CV injection of 2M NaCl in PBS at 100 cm / hr. Standard sanitation protocol includes: 0.5 N NaOH for 30 min, neutralization with 0.2 M sodium phosphate, equilibration with PBS with storage in 0.1 N NaOH.

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