Protein Capture Science
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CERTIFICATE OF ANALYSIS

PRODUCT NAME: *i*CapTag™ resin (prepacked columns & bulk resin)

CATALOG NUMBERS:

#05002502	TKPCS
#05001002	#020000202R
#02000502	#020000602R
#02000102	#02000502R
#02000102_Free	#050001502

LOT NUMBER: AP210001

SPECIFICATIONS:

Table 1: Important expected characteristics of the *i*CapTag™ resin.

Parameters	Requirements[1]
Ligand Density	15 ± 2 g/L
Capacity DBC Q_{10}[2]	>7 g/L (no bed compression; based on GFP test target protein)
Cleavability	95% or higher cleavage in 5 hours at room temperature
Base Bead	Hardened agarose (6% cross-linked agarose)
Particle Size, d_{50v}[3]	~90 μm
Recommended Maximum Operating Flow Velocity	300 cm/h in a 5 cm diameter x 10 cm bed height column using aqueous buffer
Maximum Back Pressure	40 psi
Typical Working Temperature	18 ℃[4] to 37 ℃
Chemical Stability	Resin is initially stripped at pH ≤ 2.0 followed by buffers with the pH between 6.2 and 8.5. Neutral to salts, sugars, and other buffer additives, including protease inhibitors. Stable under standard caustic sanitization protocols.
Resin Packing	50% slurry in storage solvent
Storage	18% ± 2% Ethanol, 4 ℃ to 8 ℃
Color of the resin	White to off-white slurry

RESULTS:
Parameters above (see Table 1): Passed the test.

Review Date: 10/26/2023
Analytical Services Laboratory (Production Facility)

[1] Specific parameters of the resin are included in the Certificate of Analysis based on the lot number of the resin.
[2] Dynamic binding capacity at 10% breakthrough.
[3] Median particle size of the cumulative volume distribution.
[4] While the recommended operating temperature is around room temperature (20 ℃), there may be situations in which cleavage occurs too rapidly at higher temperatures. In this case the temperature can be decreased to as low as 4 ℃ to suppress cleavage during the binding and pH shift phases. Do not freeze.