

RECOMBINANT PENTAMERIC C-REACTIVE PROTEIN

Innovation from Molecular Design to Immunoassay Application

✓ Flexible Reagents Compatibility

Validated on an in-house rabbit pAb combination mouse mAb on separate latex bead reagents.

Validated on an in-house two different mouse mAbs on separate latex bead reagents.

✓ Superior Purity & Stability

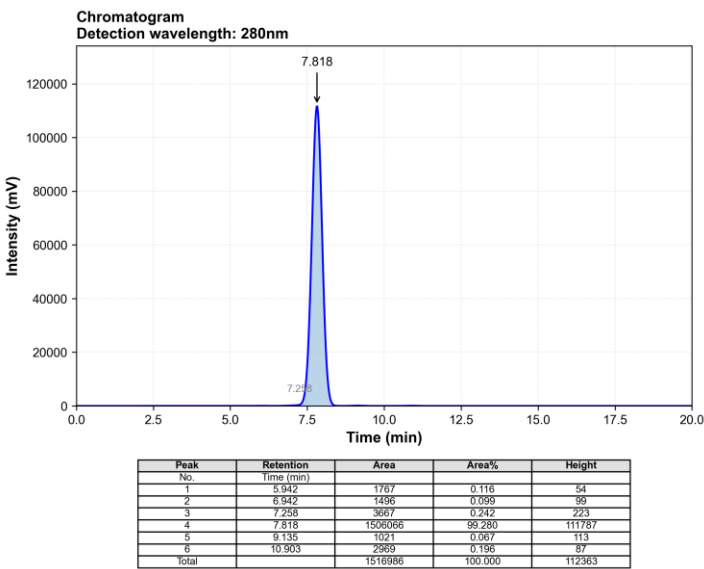
Stability (>95% Activity after 15 Days at 37°C)
>98% Purity (HPLC Verified) vs. 93.44% Blood-Derived.

✓ Cost-Effective & Stable supply

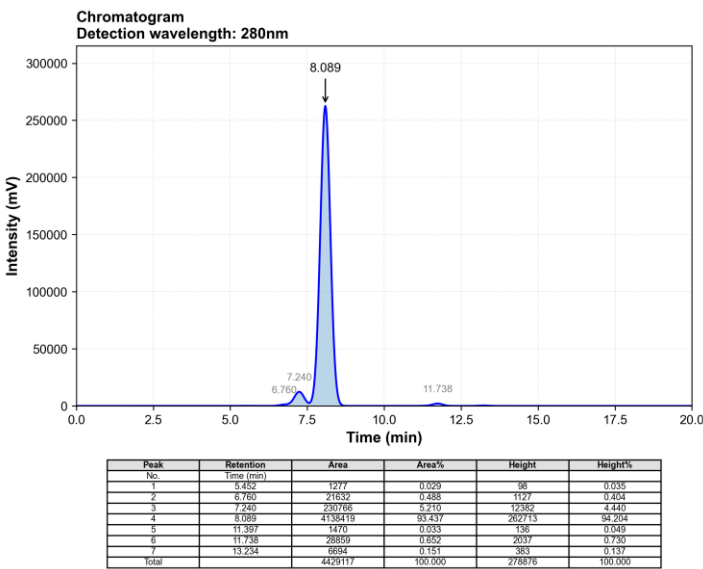
Recombinant production offers competitive pricing, ensuring batch-to-batch consistency.
Production capacity up to 1000 grams/year.

1. Purity Comparison: Recombinant vs. Blood-Derived CRP (HPLC)

✓ Purity: AmbiGen's recombinant CRP demonstrates 99.28% (Lot: 2105) purity by HPLC analysis, significantly exceeding blood-derived CRP (93.44%). The single dominant peak confirms minimal impurities, ensuring superior calibrator accuracy and consistency.



Recombinant CRP HPLC analysis result



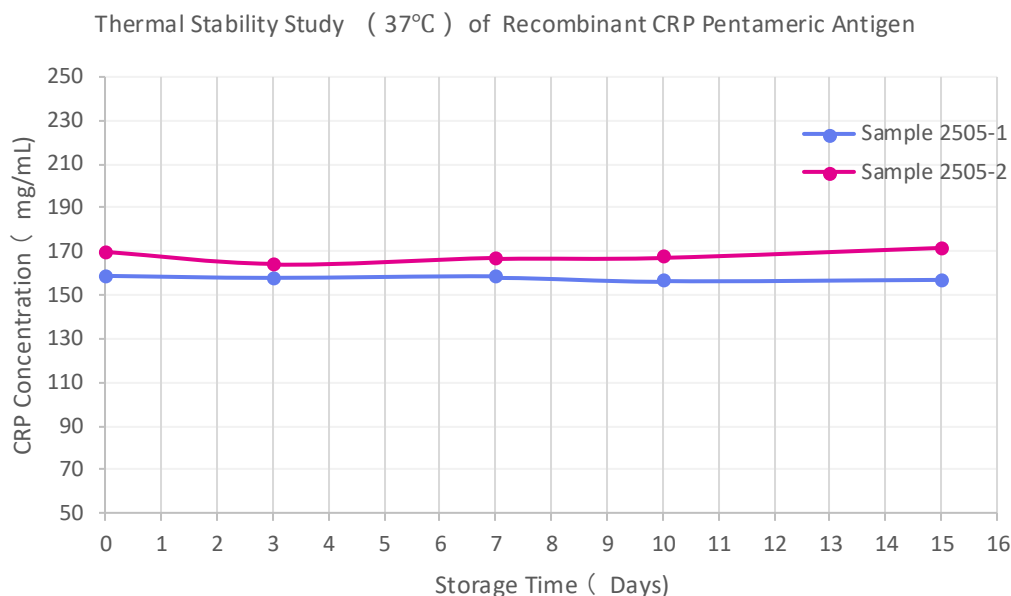
Blood-derived CRP HPLC analysis result

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2. Thermal Stability Study

Both test samples (Lot 2505-1 and Lot 2505-2) maintained >95% activity after 15 days at 37°C. This exceptional stability ensures consistent calibrator performance, extended shelf life, and reduced operational costs through less frequent requalification.



3. Validated Compatibility and lot-to-lot Consistency Performance

Both test samples (Lot 2505-1 and Lot 2505-2) show exceptional linear correlation ($R^2=0.9995$ - 0.9999 , slope= 1.0000 - 1.0055) across the entire measurement range (0-300 mg/L). This validation demonstrates that recombinant CRP delivers accuracy and precision matching the best blood-derived calibrators—without blood-source limitations.

