

FIG. 1

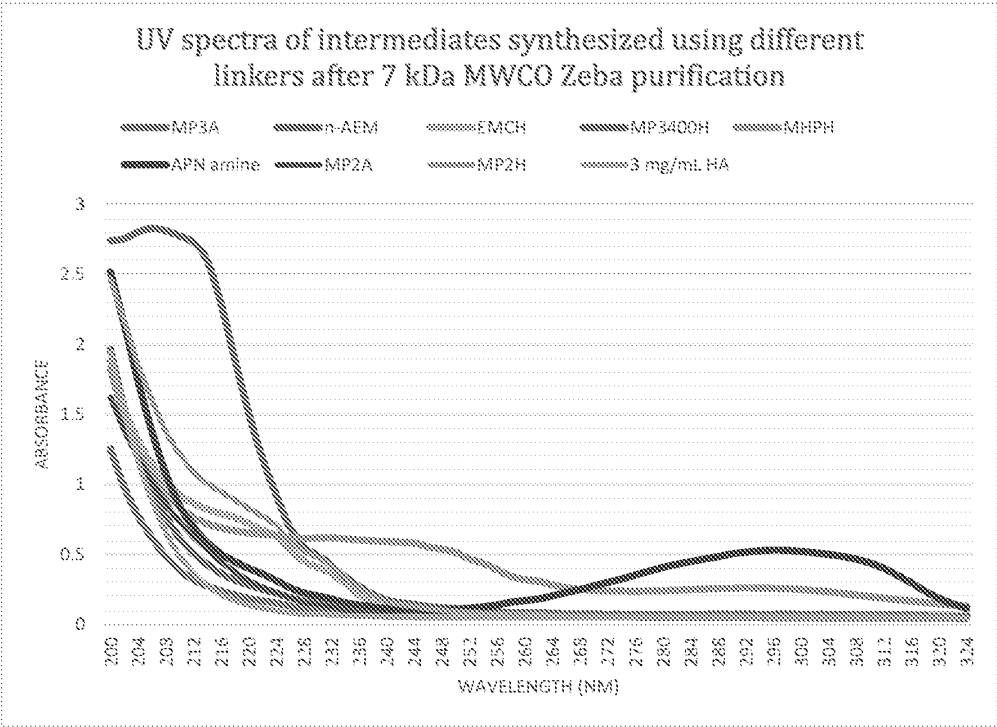


FIG. 2

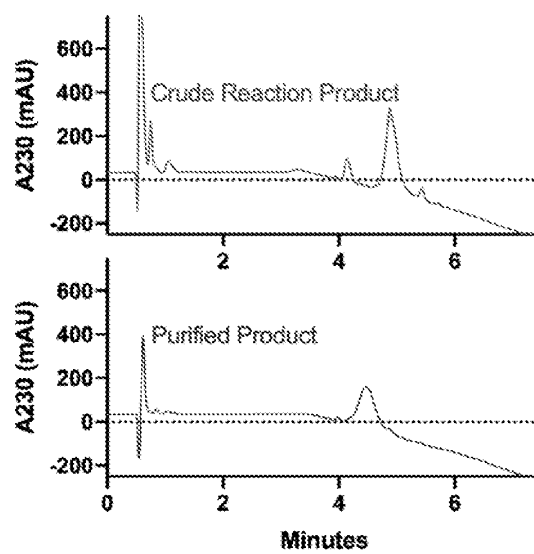


FIG. 3

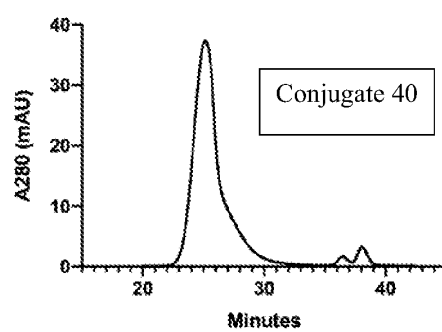


FIG. 4

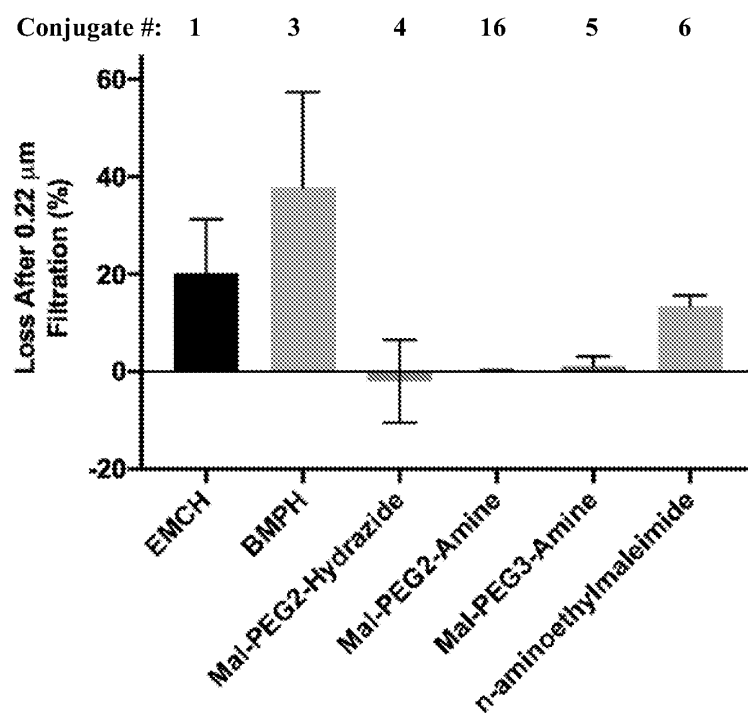


FIG. 5

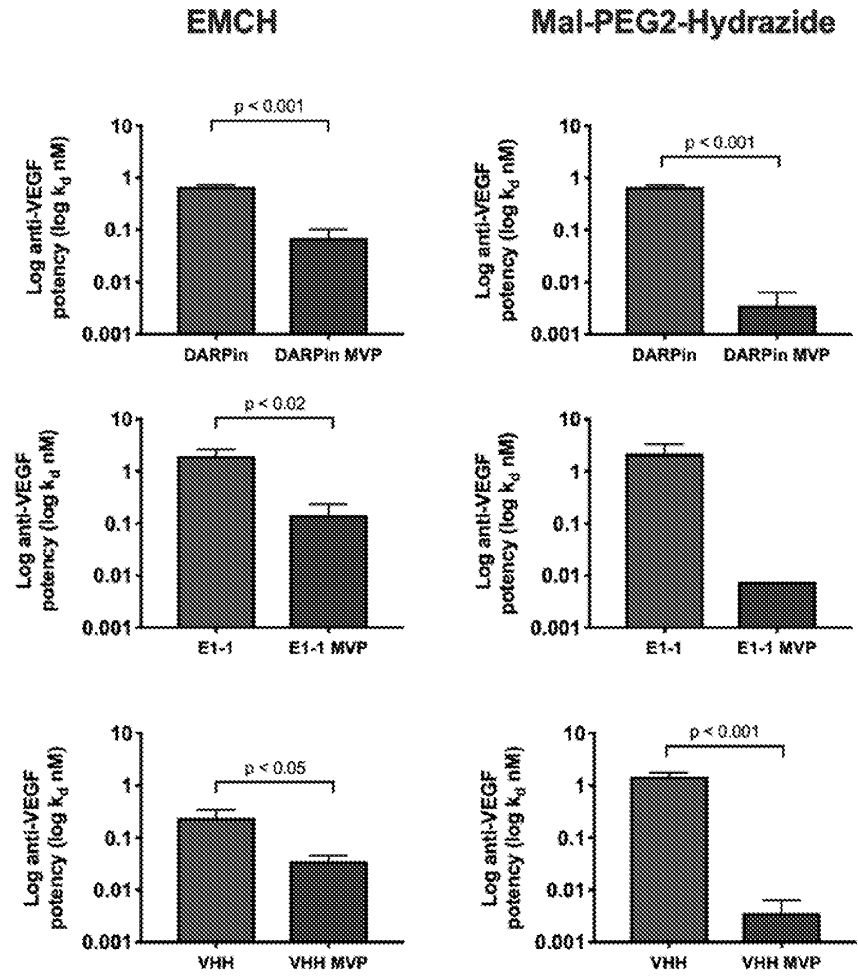


FIG. 6

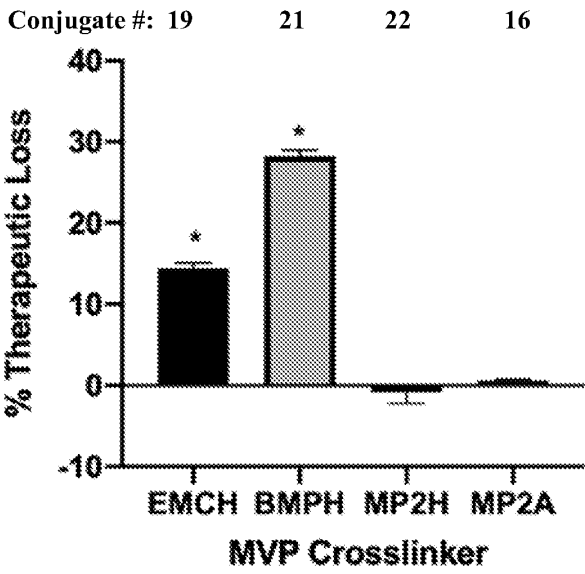


FIG. 7

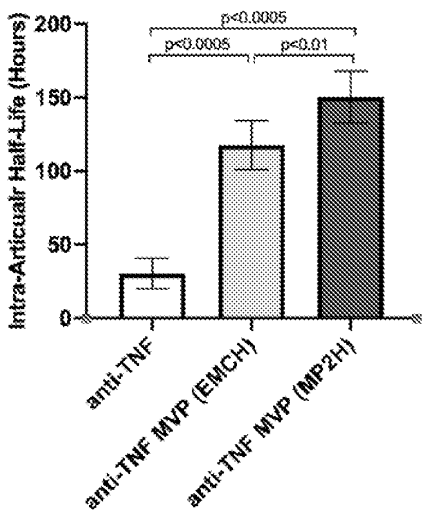
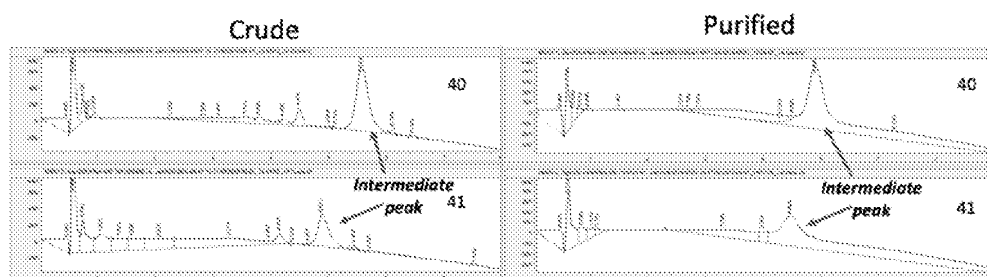


FIG. 8A

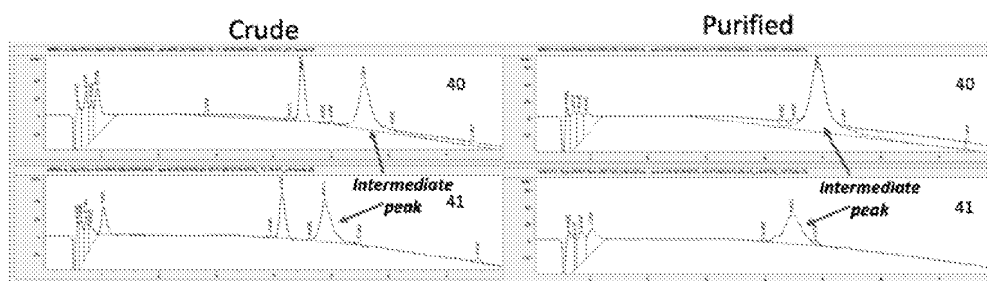
C8 mAb RP HPLC intermediates 40 (EMCH)
and 41 (MP2H) 230 nm traces



Lower MP2H retention time indicates lower hydrophobicity

FIG. 8B

C8 mAb RP HPLC intermediates 40 (EMCH)
and 41 (MP2H) 254 nm traces



Lower MP2H retention time indicates lower hydrophobicity

FIG. 9

Avastin MVP PAGE analysis, no sample heating High EDC MVPs

- A. 6 μ g purified 200525
9500 equivalents EDC
EMCH Avastin MVP
122 maleimides
- B. 6 μ g pure 200527 9500
equivalents EDC MP2H
Avastin MVP reaction
95 maleimides

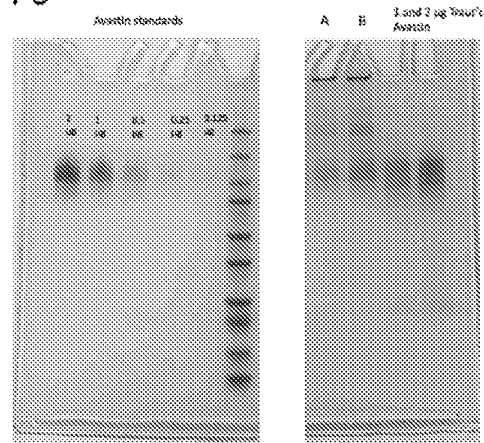


FIG. 10

Goat anti human IgG MVP PAGE with sample heating

- A: Ladder
- B: goat anti-human IgG MVP
- MP2H high EDC intermediate
 - 95 valency
- Antibody valency = 5
- Reaction efficiency = 42%
 - Maleimide in excess

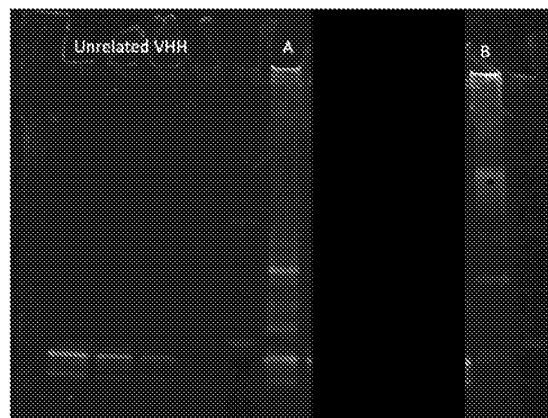


FIG. 11

Purified Conjugate 24 (MP2H) and 25 (EMCH) anti-VEGF G5-1 VHH conjugates 280 nm SEC trace

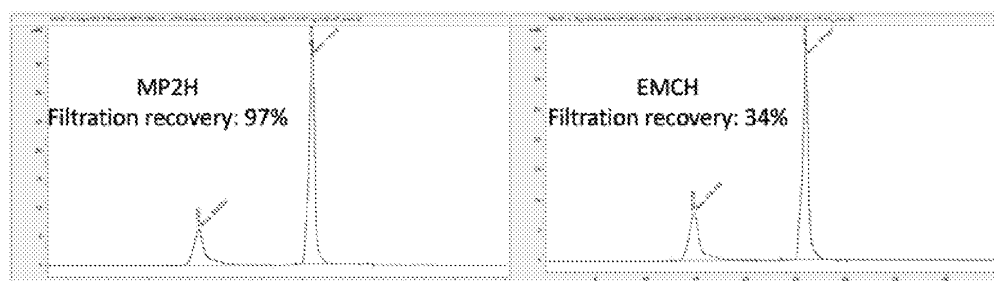
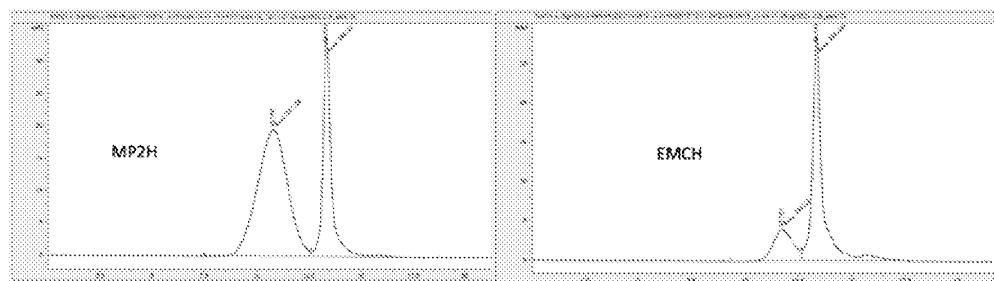


FIG. 12

DARPin conjugates 30 and 31 SEC traces 280 nm



EMCH conjugate showed lower reaction efficiency,
higher percentage of unreacted DARPin, and smaller MVP size by SEC

FIG. 13

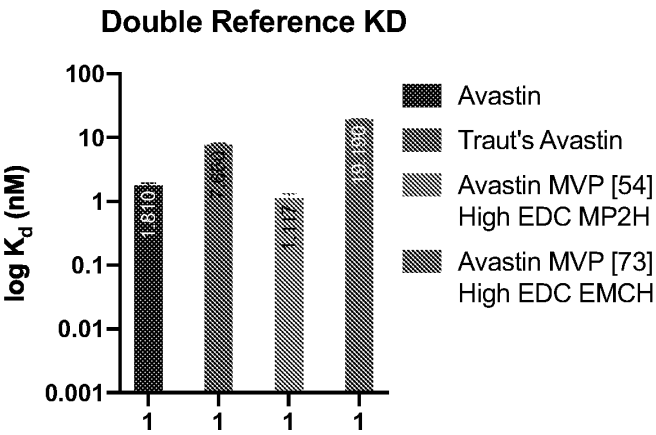


FIG. 14

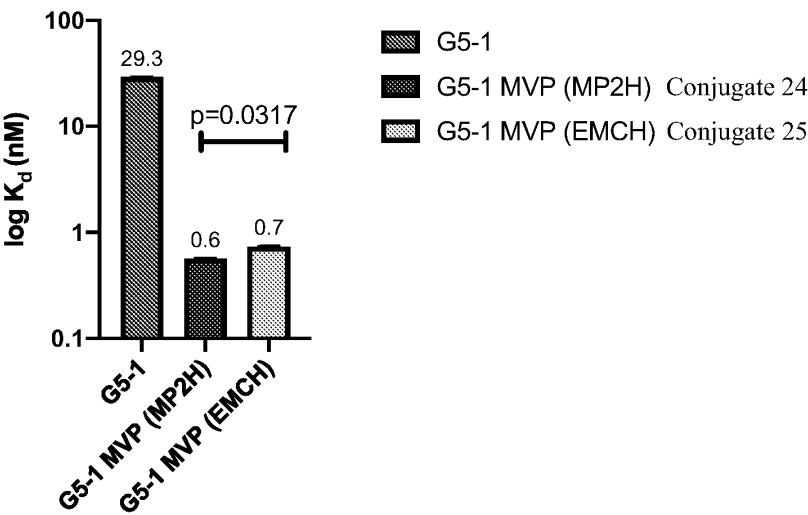


FIG. 15A

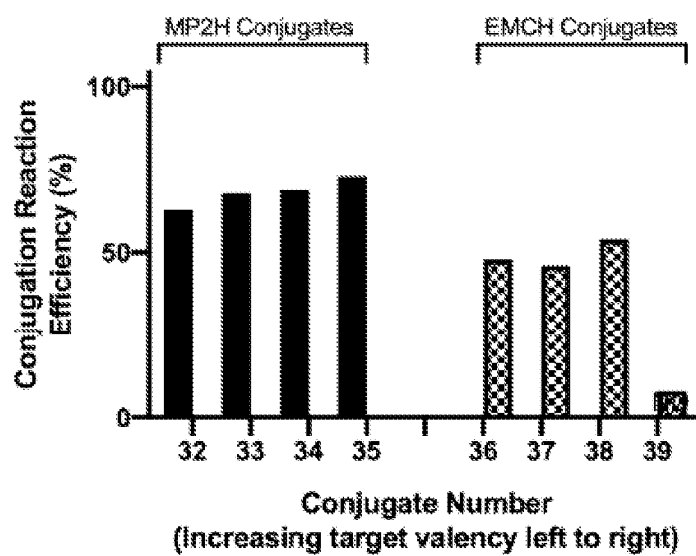


FIG. 15B

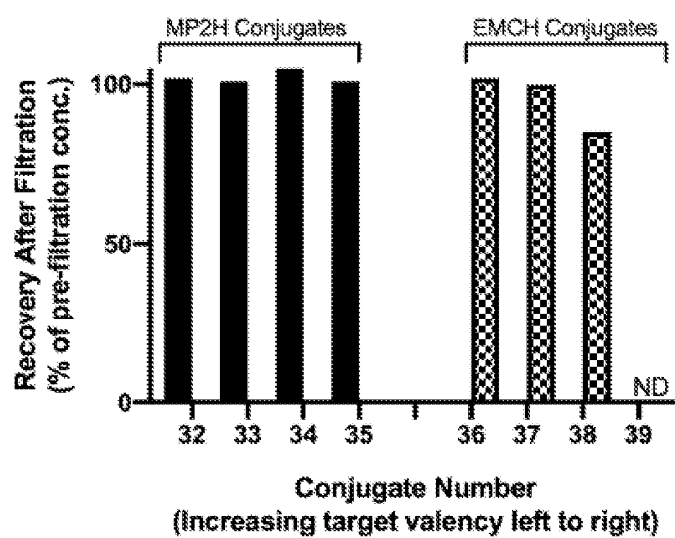


FIG. 16

aTNFa αHelix MVP Chemical Linker Comparision

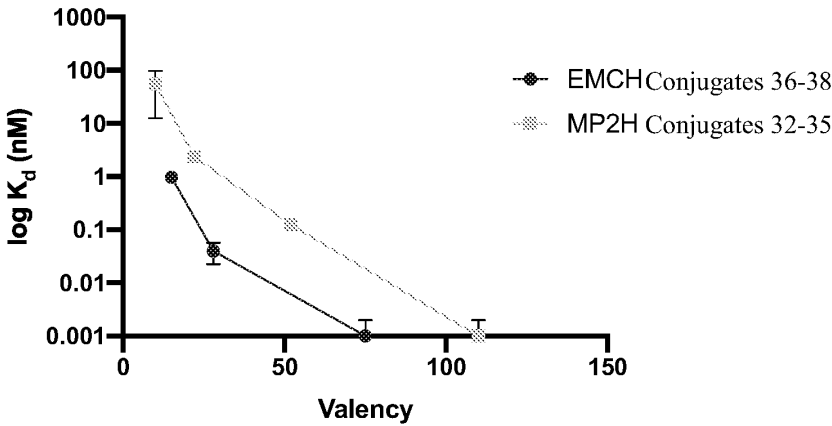


FIG. 17

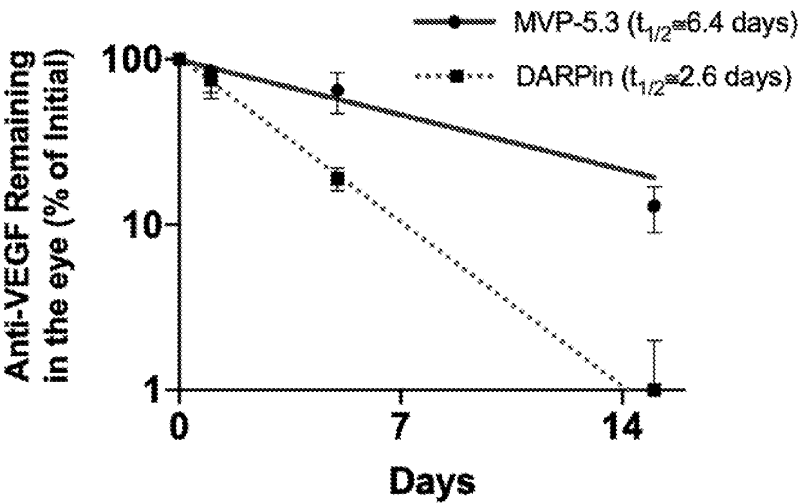


FIG. 18A

Purified 2 kDa natriuretic peptide (NP) polymer conjugate PAGE

- A. EMCH NP conjugate synthesized with 0.5 equivalents TCEP
- B. MP2H NP conjugate
- C. MP2H NP conjugate synthesized with 0.5 equivalents TCEP
- D. EMCH NP conjugate

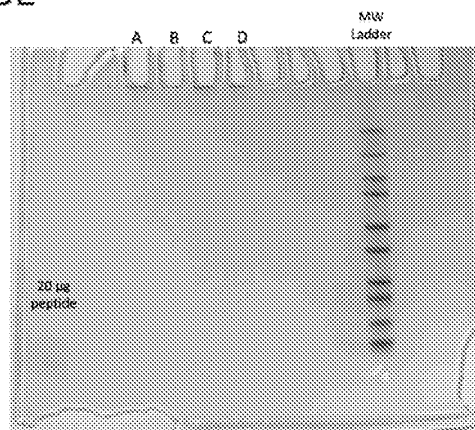


FIG. 18B

Purified 2 kDa natriuretic peptide (NP) polymer conjugate PAGE-heated sample

- A. EMCH NP conjugate synthesized with 0.5 equivalents TCEP
- B. MP2H NP conjugate
- C. MP2H NP conjugate synthesized with 0.5 equivalents TCEP
- D. EMCH NP conjugate

