

A paper-based colorimetric assay for rapid detection of four macrolides in milk

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Caption:

Fig. S1. LC-MS/MS analysis of milk sample.

Fig. S2. LC-MS analysis of CLA-CMO.

Fig. S3. The SDS-PAGE of immunogens and coating antigens.

Table S1. Cross-reactivity of structurally related analogs to the Mab 4D5 using an ic-ELISA.

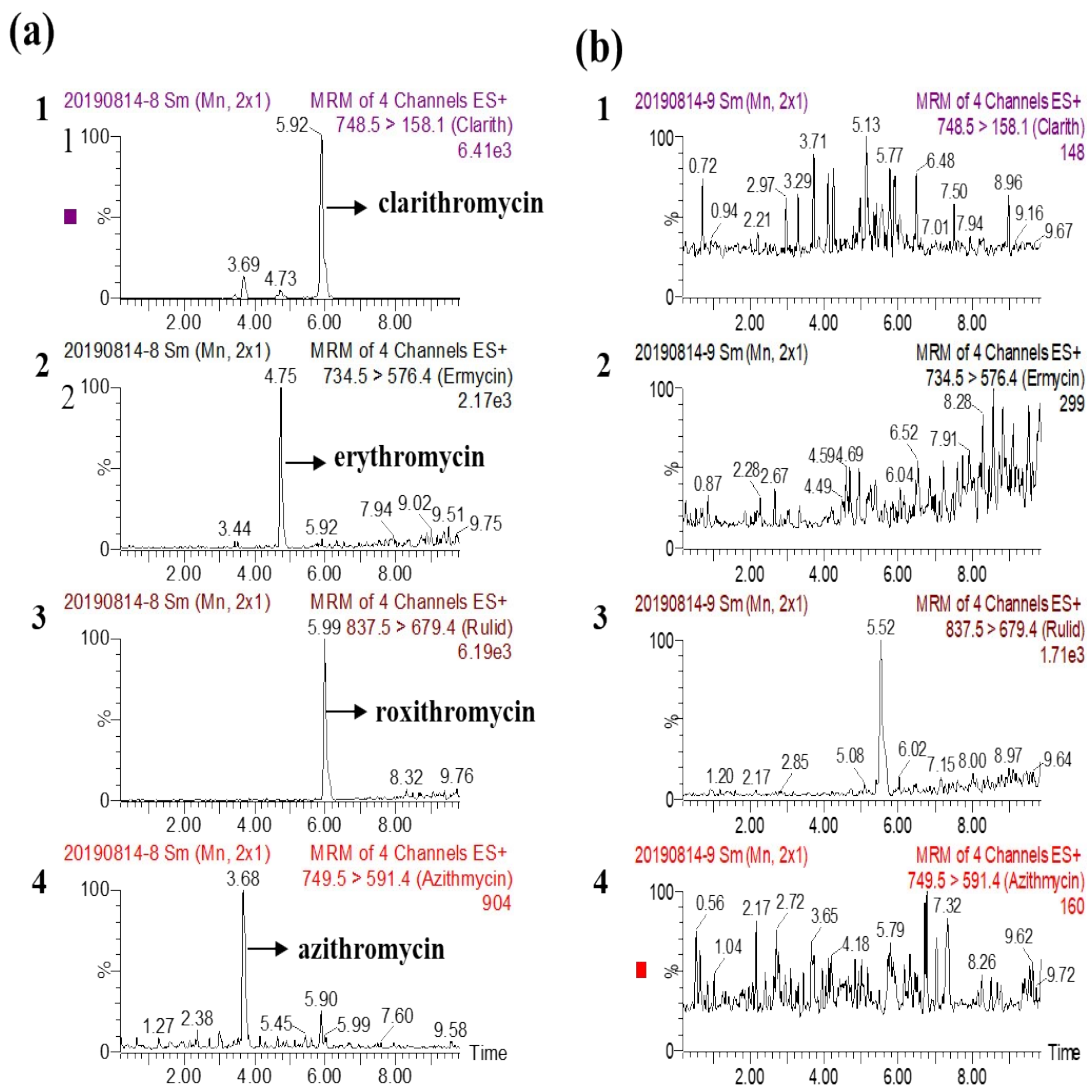


Fig. S1. LC-MS/MS analysis of milk sample. (a) MRM spectrum of the four macrolides standard analytes: CLA, ERY, ROX and AZI at the concentration of 3 ng/mL; (b) MRM spectrum of the four macrolides in milk negative sample.

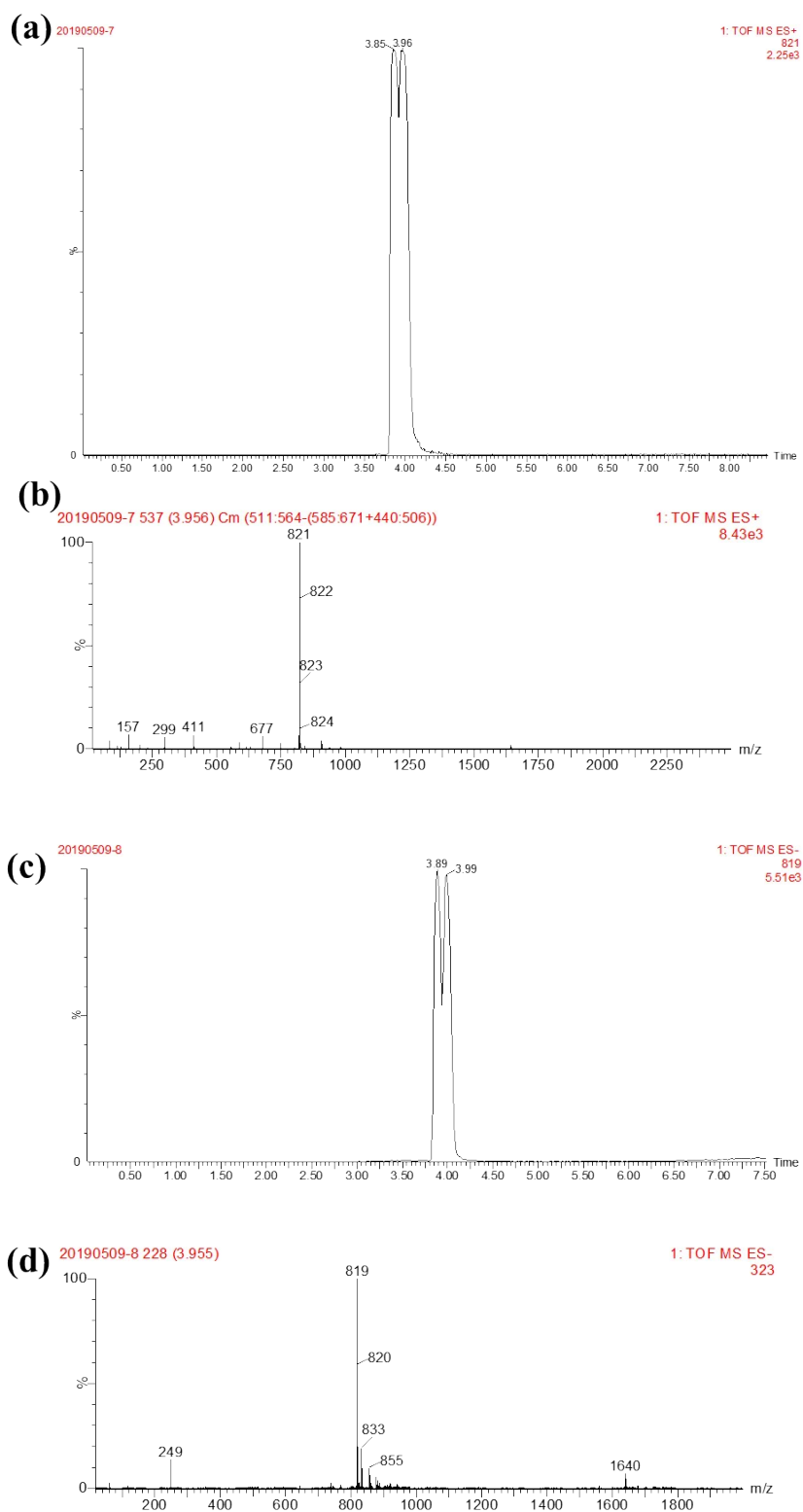


Fig. S2. MS analysis of CLA-CMO. (a) (b) the mass spectrum of CLA-CMO in positive ion mode; (c)(d) the mass spectrum of CLA-CMO in negative ion mode.

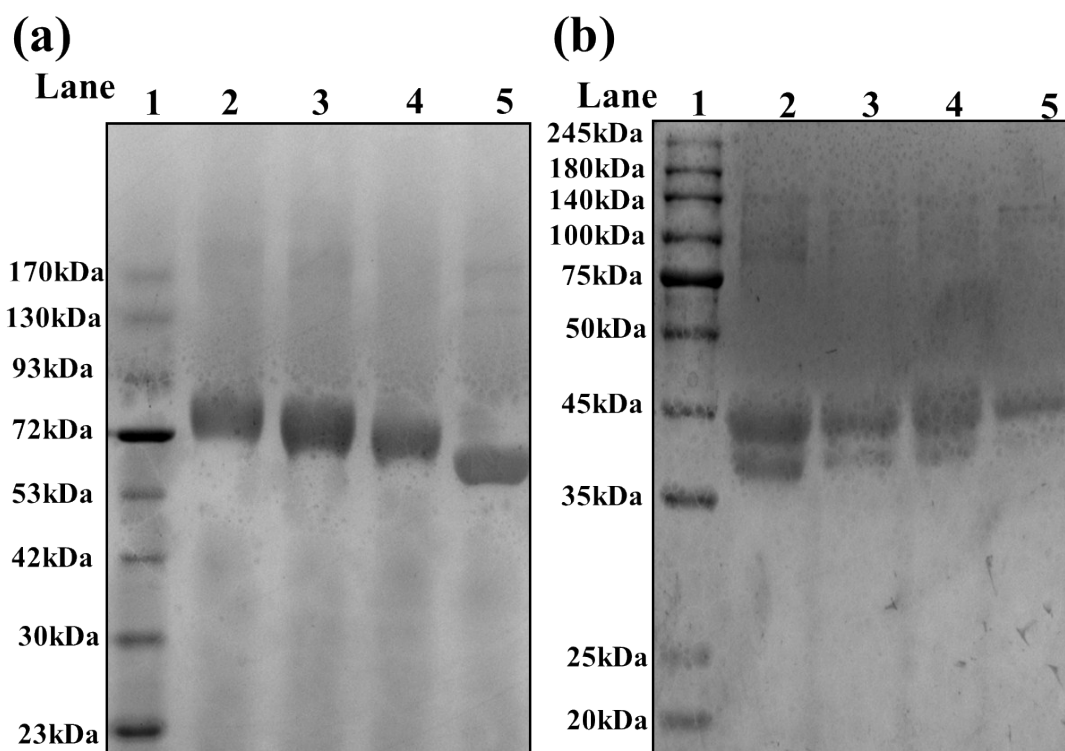
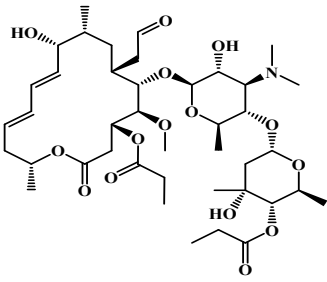
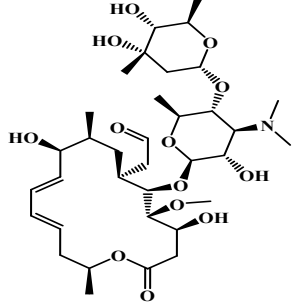
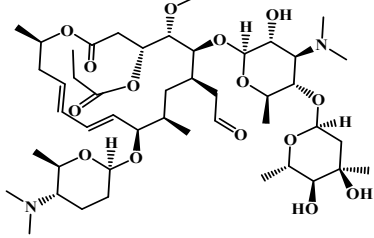
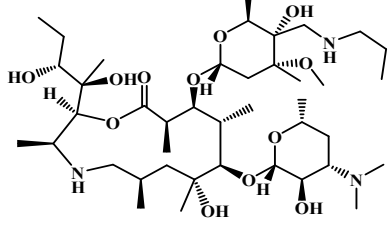
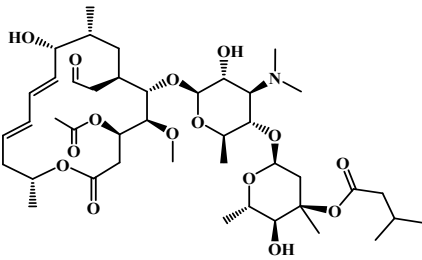
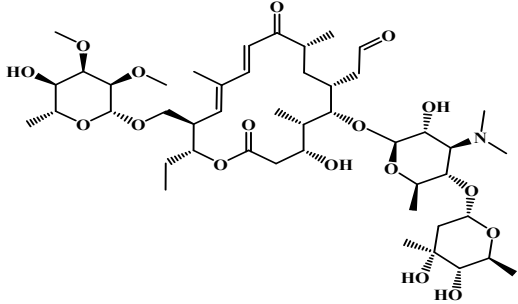
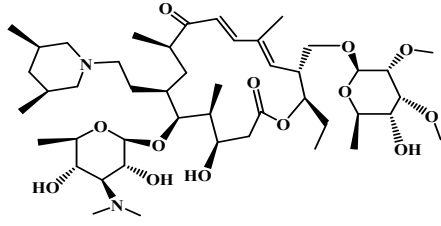
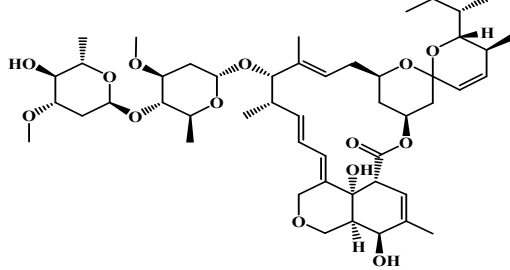
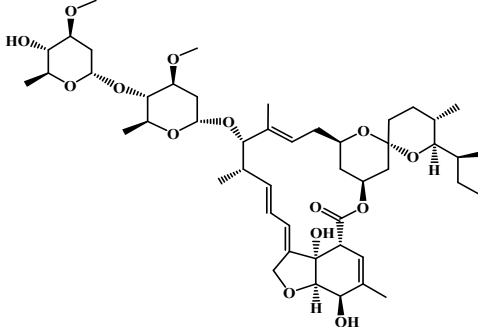
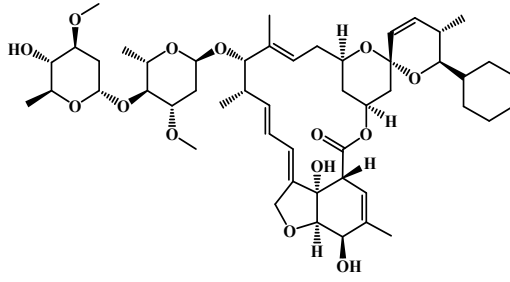
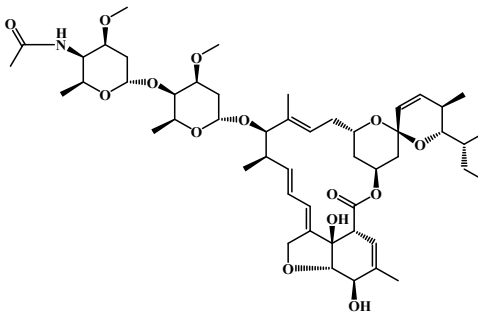


Fig. S3. The SDS-PAGE of immunogens and coating antigens. (a) SDS-PAGE of CLA-CMO-BSA. Lane 1, Marker; Lane 2, CLA-CMO-BSA90; Lane 3, CLA-CMO-BSA60; Lane 4, CLA-CMO-BSA30; Lane 5, BSA; (B) SDS-PAGE of CLA-CMO-OVA. Lane 1, Marker; Lane 2, OVA; Lane 3, CLA-CMO-OVA5; Lane 4, CLA-CMO-OVA10; Lane 5, CLA-CMO-OVA15.

Table S1. Cross-reactivity of structurally related analogs to the Mab 4D5 using an ic-ELISA.

Antibiotics	Structure	IC ₅₀ (ng/mL)	CR (%)
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Medecamycin		>10.0 ^a	< 2.0
Kitasamycin		>10.0	< 2.0
Spiramycin		>10.0	< 2.0
Tulathromycin		>10.0	< 2.0
Josamycin		>10.0	< 2.0
Tylosin		>10.0	< 2.0

Tilmicosin		>10.0	< 2.0
Avermectin		>10.0	< 2.0
Ivermectin		>10.0	< 2.0
Doramectin		>10.0	< 2.0
Eprinomectin		>10.0	< 2.0

^a >10.0 means that absorbance values cannot be decreased at the antibiotic concentration of 10 ng/mL.