

AFLATOXIN NANOBODY IMMUNOABSORBENT AND IMMUNOAFFINITY COLUMN AND PREPARATION METHOD AND USE THEREOF

Abstract

An aflatoxin nanobody immunoabsorbent and immunoaffinity column and preparation method and use thereof. The immunoabsorbent comprises a solid phase carrier and aflatoxin B1 nanobody 2014AFB-G15 coupled with the solid phase carrier. The 50% inhibiting concentration IC_{50} of aflatoxin B1 nanobody 2014AFB-G15 to aflatoxin B1 is 0.66 ng/mL, and the cross-reactivity of aflatoxin B1 nanobody 2014AFB-G15 to aflatoxins B2, G1, G2, and M1 are respectively 22.6%, 10.95%, 32.1% and 26%. The amino acid sequence of aflatoxin B1 nanobody 2014AFB-G15 is as depicted by SEQ ID NO: 7, and the coding gene sequence thereof is as depicted by SEQ ID NO: 8. The aflatoxin nanobody immunoaffinity column can be used for purification and concentration of sample extract prior to computer testing, and the immunoaffinity column can be reused repeatedly.

No Figure