

论著

双抗原夹心ELISA检测鼠疫F1抗体技术的应用

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摘要:

【摘要】 目的 研究双抗原夹心酶联免疫吸附试验(DAgS?ELISA)检测鼠疫 F1 抗体技术在鼠疫监测中的实用性。方法 用DAgS?ELISA和间接血球凝集试验(IHA)微量法对比检测558份标本鼠疫F1抗体。结果 IHA检测出阳性33份, DAgS?ELISA检出阳性31份, 阳性符合率为90.91%, 阴性符合率99.81%, 总符合率99.28%, 二者检出阳性率分别为5.91%和5.56%, 差异无统计学意义( $\chi^2=0.25, P=0.625$ )。2种方法测定27份鼠疫免疫血清均阳性, IHA微量法的敏感性高于DAgS?ELISA( $t=3.023, P=0.006$ )。结论 DAgS?ELISA检测鼠疫F1抗体敏感性低于IHA微量法, 但特异性好, 无前滞反应, 可避免初筛漏检问题。

关键词: 酶联免疫吸附试验 鼠疫耶尔森菌 F1抗原 抗体

Application of double antigens sandwich enzyme linked immunosorbent assay (DAgS?ELISA) on the detection of Yersinia pestis F1 antibody

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Abstract:

【Abstract】 Objective To study the practicability of double antigens sandwich enzyme linked immunosorbent assay (DAgS?ELISA) on the detection of Yersinia pestis F1 antibodies. Methods A total of 558 samples antibodies of anti?F1 antigen were detected by DAgS?ELISA and trace indirect hemagglutination assay (trace?IHA). Results Thirty three samples were positive tested by IHA, 31 positive by DAgS?ELISA, the positive accordance rate was 90.91%, 99.81% for negative accordance rate, 99.28% for the total accordance rate. The positive rate detected by IHA and DAgS?ELISA were 5.91% and 5.56% respectively, and no statistics difference was found ( $\chi^2=0.25, P=0.625$ ). About 27 the immuno?serum were positive detected by IHA and DAgS?ELISA methods, and the sensitivity of IHA test were all higher than that of DAgS?ELISA ( $t=3.023, P=0.006$ ). Conclusion Sensitivity of DAgS?ELISA is lower than that of trace?IHA, but its specificity is better and no primary inhibitory phenomena, and could exempt from leak detection in the preliminary screening.

Keywords: Enzyme linked immunosorbent assay Yersinia pestis Fraction?1 antigen Antibody

收稿日期 2009-03-20 修回日期 网络版发布日期

DOI:

基金项目:

河北省医学适用技术跟踪项目(GL200635)

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