

检查的结果有相似之处。

(本项工作承福建省防疫站于恩庶教授及平潭县防疫站大力协助, 谨致谢意)

Detection Antigen of Rickettsia tsutsugamushi by Using Monoclonal Antibody Zhang Huijun, et al., Beijing Tropical Medicine Research Institute, Beijing, 100050

Dot-ELISA was used with HRP-labelled monoclonal antibodies Kp3 (IgG₁) and Kp4-6 (IgM) against antigen of the Karp strain of *Rickettsia tsutsugamushi* to detect the antigen of *R. tsutsugamushi*. The positive rate of sera of 56 acute scrub typhus patients and 37 wild rats caught from the countryside of the endemic area as well as 29 batches of chiggers collected from the wild rats were 92.9%, 100% and 89.7%, respectively. No cross reaction was found with antigens of other rickettsia groups such as *R. mooseri*, *R. prowazeki*, *R. burneti* and *R. rickettsi*. In patients suffering from acute scrub typhus the antigen of *R. tsutsugamushi* could be detected earlier in the course of illness than the antibody.

This method is very sensitive that an amount of antigen of 6.7ng/ μ l can be detected.

It is easy to perform and the results can be read by naked eye.

Key words *Rickettsia tsutsugamushi*, Chigger Monoclonal antibody Dot-ELISA

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抗原基因克隆筛选中出现的一个问题

毕德增 张远富 蔡虹 宋秀萍

我们在做普氏立克次体抗原基因克隆的筛选中, 出现了一个原先没有预想到的问题。正常大肠杆菌与普氏立克次体免疫的兔血清呈阳性反应, 无论怎样洗涤菌体, 也不论菌体的浓度是高是低, 只要加上血清就呈阳性反应。如果只加菌体, 不加血清, 反应呈阴性, 反之亦然。显然, 阳性反应与血清有关。后来, 我们将血清用大肠杆菌吸收处理, 吸收处理后的血清不再与大肠杆菌起反应。我们追究其原因是用于免疫的兔

子不是无菌动物, 也不是无特殊病原菌(SPF)动物。免疫后, 为了喂养、管理及观察之方便, 将兔子放在卫生条件差的楼梯口饲养, 致使兔子被大肠杆菌感染。这个问题值得我们注意, 为保证实验结果的可靠性, 必须注意动物的质量。

本文作者单位: 102206 北京市·中国预防医学科学院流行病学微生物学研究所