

Multiplex PCR assay detection of Y chromosome micro deletions

ICMR is seeking potential agencies interested in commercialization of a multiplex PCR based assay for detection of Y chromosome microdeletions

Product/Process:

Method for detection of Y chromosome microdeletions for diagnosis of male infertility

Application/Uses:

1. Male infertility is on increasing trend and one of the major cause is microdeletions of the Y chromosome
2. In India, 8-10% of infertile males harbour Y chromosome microdeletions
3. Detection of Y chromosome microdeletions is a diagnostic test to establish cause of male infertility
4. Diagnosis of Y chromosome microdeletions is clinically important for genetic counselling and decision making for assisted reproduction
5. This assay is ideal for screening of infertile males choosing to undergo IVF/ICSI to achieve parenthood and infertile males wishing to cryopreserve sperm.

Salient Technical Features:

1. The assay is a simple four tube multiplex assay for a unique panel of STS markers that can detect 99.9% of Y chromosome microdeletions that are relevant in the Indian population
2. The assay detects Y chromosome microdeletions in males that remain undetected by markers currently employed
3. Developed assay is specific for male samples only, shows no cross reactivity to female DNA
4. The assay has minimal inter and intra-assay variability
5. Assay has been optimised to function with DNA isolated from buccal scrapings demonstrating its broad applicability
6. Assay ready for Technology Transfer

Scale of Development:

This method has been developed up to laboratory scale and validated

Contact Person

Dr. Sadhana Srivastava

Scientist F, IPR Unit

Indian Council of Medical Research

Department of Health Research

(Ministry of Health & Family Welfare)

New Delhi-110029(India)

Tel: (O) 011-26589959

011- 26589745/Ext. 372

Fax: 011-26588755

Email: sadhana_s@ymail.com