



Accurate and reliable fetal gender determination using Primer Design Y-chromosome detection kit

Zara Wasim Haidi

University of Tehran, Iran

Abstract:

Aim: To validate a protocol for noninvasive fetal sex determination in maternal plasma and demonstrate its applicability to clinical practice.

Method: Peripheral blood from 318 pregnant women was collected from 7 to 12 weeks of gestation. Real-time PCR was performed for multicopy DYS14 marker sequence located within the TSPY gene by the TaqMan probe assay. An exogenous spiked-in amplification/ detection system was also used as a positive control for the extraction process. A diagnostic algorithm was designed using a combination of these two markers. Fetal gender determined by noninvasive prenatal diagnosis (NIPD) was compared with ultrasound results. The Fisher exact test (two-sided) was used to determine sensitivity and specificity with 95% confidence intervals (CIs).

Results: A single false-positive result was obtained in all 318 pregnancies. The overall sensitivity and specificity were 100% (95% CI 97.7–100%) and 99.3% (95% CI 96.4–99.9%), respectively. Pregnancy outcome was obtained in all cases, including 154 male-bearing and 164 female-bearing pregnancies.

Conclusions: Primer Design Y-chromosome detection kit for fetal sex determination in plasma of early weeks pregnant is highly accurate and clinically applicable if robust reporting criteria are applied.

Key Words: fetal sex determination; Y-chromosome detection kit; Real-Time PCR

Biography:

Zara Wasim Haidi has done her degree in the University of Tehran, Iran



Recent Publications:

- Choudhry M. I. (1984) Social Theory Research and Problems, Azizpublishers, Lahore
- Daily Mashriq, Peshawar, (Dec30, 2007) Article Nabi Karim(SAW) aur Mazah ,p.8 Jamil,M
- K(2002)Gomal University Journal of Research, Editor. Saeed Anwar Vol.19, pp.205-20
- Jay W S (1979). Mass Media Education and a better society, USA, Page 29
- Malik M H (1990) Taleemi Imrانيات, Muqadara Qoumi Zaban Islamabad, p.317
- Mian M A(Dec.2007) Urdu Digest Lahore,Editor,Altaf HQ, page, 51
- Nasir, NA (1995)Islami Saqafat Feroz sons Ltd Lahore p.436
- Siddiqui SR, Fehmi N (1992) Muslim Gharane per Zare Iblagh ke Asrat Idara Muaraf
- IslamiLahore,p.40

Webinar on Annual Meet on Maternal & Infant Diseases and Medicine September 18, 2020, Paris, France

Citation: Zara Wasim Haidi,; Annual Meet on Maternal & Infant Diseases and Medicine; MATERNITY DISEASE 2020; September 18, 2020, Paris, France