

IP MARKETPLACE

CONNECTING INNOVATION TO YOUR BUSINESS

TECH OFFER

FOOD AUTHENTICATION KIT



▶ MORE INFORMATION

MEGA-TREND

- Food security

TECHNOLOGY READINESS LEVEL (TRL)

- TRL 4 (Lab Prototype - Lab Testing)

PATENT/ GRANTED NUMBER

- UI 2021000958

▶ TECHNOLOGY OVERVIEW

Meat and meat products have been considered an important source of proteins throughout the globe. Meat products that are of high price and undergo several processing steps become the target of fake labelling and are often adulterated with meats of lower price or objectional species. Hence, meat authenticity and traceability from farm to fork need to be prioritized by the state, national and international regulatory agencies. Beef, buffalo, chicken, duck, goat, sheep, and pork are the popular meats bearing nutritional, economic and cultural/religious importance, having the top consumption rate in most corners of the globe. Given the growing demand for meat products, there have been frequently reported incidences of meat fraud involving these species.

Although several singleplex and multiplex PCR assays are documented for the identification of various animal species, no study has developed a heptaplex PCR (h-PCR) system for the simultaneous identification and differentiation of the seven species like a cow, buffalo, chicken, duck, goat, sheep and pig in thermally-processed food products. Thus, we present a heptaplex PCR assay as a potential tool for the rapid, specific, sensitive, cost-effective, and simultaneous detection of short-targeted mitochondrial DNA of meat (cow, buffalo, chicken, duck, goat, sheep and pig) origins in food products.

CONTACT US!

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