VALIDATION OF THE PROMEGA CORPORATION PENTA BEC TRIPLEX

Scott Johnson, Zachary Slinker

Paternity Testing Corporation, Columbia, MO

PTC has completed validation and generated Caucasian, Hispanic and African American population databases for two new Penta STR markers.

Even when 15 STR markers are used, some paternity cases cannot be resolved. Single and occasionally double inconsistencies between father and child are seen in 1% to 2% of paternity cases. These inconsistencies are taken into account in the statistical calculations of the paternity index. Often additional testing is necessary in order to determine if the inconsistency is a mutation or an exclusion.

Promega Corporation plans to offer a new Penta triplex on a custom order basis. This new triplex will contain primers for two new markers, Penta B and C. It will also contain the Penta E primer, allowing a cross check of the PowerPlex® 16 Bio and PowerPlex® 2.1 systems.