

Newborn screening of Cystic Fibrosis

- Fluorometric enzyme immunoassay for the determination of human immunoreactive trypsinogen from blood samples dried on filter paper.
- Fluorescence detection for high sensitivity
- Proven clinical performance
- Compatible with Labsystems Diagnostics Ns2400 automation system

About

Cystic Fibrosis (CF) is an autosomal recessive disorder affecting the lungs, pancreas, intestine and liver. CF is the most common in Caucasians with an incidence rate 1:2500 newborns. CF is caused by mutation in the gene for the protein cystic fibrosis transmembrane conductance regulator (CTFR). Large-scale neonatal screening for CF is performed by identification of increased levels of immunoreactive trypsinogen (IRT) from dried blood spot samples.

Trypsinogen is the precursor of the pancreatic enzyme, trypsin, and specific marker of pancreatic function. Neonatal IRT FEIA is a solid phase fluorometric enzyme immunoassay in which IRT is eluted from dried blood discs. It simultaneously forms a sandwich between the solid phase, coated with an antibody that recognizes Trypsinogen and a second antibody, which is labeled with horseradish peroxidase (HRP). Fluorogenic substrate solution (3-p-(hydroxyphenyl) propionic acid, HPPA, and H_2O_2) is added to complete the fluorescence reaction.

Assay procedure:

STEP I

Punch 3.2 mm disks from patient samples and calibrators & controls into the microplate wells.

STEP II

Add conjugate solution. Cover the plate and incubate 3 hours with shaking.

STEP III

Remove the discs and liquid, Then wash 5 x 300µL

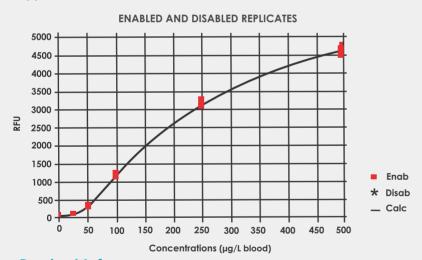
STEP IV

Add Substrate solution. Cover the plate and incubate 60 min with shaking.

STEP V

Add Stop solution. Measure immediately fluorescence at ex. 320, em. 405 nm

Typical calibration curve:



Product Info:

Cat.no.	Product name	Plate type	Packing size	Regulatory status
6199831	Neonatal IRT FEIA	96 wells Solid	960 wells	CE marked

Type 903 filter paper is used in all products.

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