Immuno IVD

SPOT-it
Screening Kit

SCID, XLA and SMA
Newborn Screening

Early Detection for Life-Saving Interventions









Markers for SCID, XLA and SMA

TREC for SCID

Severe Combined Immunodeficiency, or SCID, is a group of rare, inherited disorders caused by mutations in genes essential for the development of infection-fighting immune cells.

Early detection through newborn screening is based on the detection of **T-cell receptor excision circles** (TRECs) — circular DNA fragments formed during the T-cell maturation process.

KREC for XLA

X-linked Agammaglobulinemia, or XLA, is an X-linked recessive disease characterized by a reduced immune response to infections.

Kappa-deleting recombination excision circles (KRECs), produced during B-cell maturation, provide insights into B-cell levels. KREC is used as a marker in newborn screening for XLA and can, in combination with low TREC levels, assist in the classification of SCID.

SMN1 for SMA

Spinal Muscular Atrophy, or SMA, is an autosomal recessive neuromuscular condition that affects motor neurons in the spinal cord, leading to progressive muscle weakness and atrophy.

In 95% of SMA patients, the disease is caused by a homozygous deletion of exon 7 in the **SMN1** gene. This aberration is used as a marker for SMA in newborn screening.

SPOT-it™ Screening Solutions

Designed to meet the needs of routine newborn screening laboratories

Liquid and sample transfer by innovative plate-stacking technology

Minimized hands-on time with pre-filled and ready-to-use reagent plate

No liquid-handling equipment needed — reduces costs and saves laboratory space

From Dried Blood Spot (DBS) to screening result within 3 hours

Pre-filled reagent plates eliminate the need for separate clean room for MasterMix preparation



SPOT-it™ Screening Kit — Workflow

01

Sample Distribution

A 3.2 mm diameter punch from each DBS sample is distributed into the SPOT-it™ Filter Plate.

02

Rinse Dried Blood Spots

SPOT-it™ Rinse Solution is added to each sample to remove hemoglobin and other impurities.

03

DNA Elution

Rinsed punches are transferred into the pre-filled SPOT-it™ Elution Plate using plate-stacking technology. The plate is heat-incubated to elute DNA.

04

qPCR Amplification

Eluted DNA is transferred to the pre-filled SPOT-it™ qPCR Plate using plate-stacking technology, and the qPCR run is launched.

05

Result Interpretation

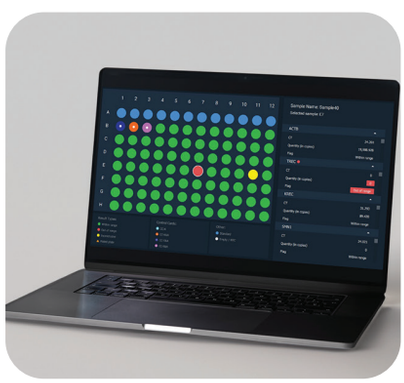
Control parameters are verified and results are visualized in the SPOT-it™ Analysis Software.



SPOT-it™ Analysis Software

SPOT-it™ Analysis Software will analyse the results from the qPCR run based on predefined quality control parameters and cutoff values for the targets in the SPOT-it™ Kits.

Results are visualized in a plate overview, making interpretation fast and effortless.



Immuno IVD

About ImmunoIVD

Sweden-based ImmunoIVD AB is dedicated to providing reliable, accessible and innovative assays for newborn screening. The CE IVD marked SPOT-it™ Screening Kits have been used across Europe since 2016. ImmunoIVD assays are highly regarded for their reliability and easy-to-use workflow, requiring minimal laboratory space and equipment investment.

Assay Information

Product name	Screening for: SCID	XLA	SMA		Samples per kit
SPOT-it™ TREC Screening Kit	✓			CE IVD	328 or 984 samples
SPOT-it™ TREC & KREC Screening Kit	✓	✓		CE IVD	324 or 972 samples
SPOT-it™ TREC & SMN1 Screening Kit	✓		✓	CE IVD	328 or 984 samples
SPOT-it™ TREC, KREC & SMN1 Screening Kit	✓	✓	✓	CE IVD	324 or 972 samples



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1800 ABACUS (AUS) 0800 222 170 (NZ) | info@abacusdx.com | www.abacusdx.com

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