



NeoNat SCID-SMA Multiplex Real-Time PCR Kit

Semi-quantitative detection of *TREC*, *KREC*,
SMN1 and *SMN2*

BACKGROUND

Thorough research in early detection of Severe Combined Immunodeficiency (SCID) and Spinal Muscular Atrophy (SMA) is vital for prevention of permanent disabilities or mortality of neonates. SCID is a congenital genetic disorder that causes life-threatening problems by suppressing the immune system. This immunodeficiency occurs due to the lack of T cells, B cells and NK cells count. SMA is autosomal recessive disorder that causes neuromuscular disorder. This disorder is characterized by progressive degeneration and irreversible loss of lower motor neurons

Assay Description

NeoNat SCID-SMA Multiplex is a Real-Time PCR kit for the screening of SCID by semi-quantitative determination of *TREC* & *KREC* and SMA by measuring *SMN1* & *SMN2* in newborn's DNA from DBS samples.

Assay features

- Efficient workflow from DNA extraction to the result
- 3.2 mm DBS as input
- Ready to use reaction mix
- DBS controls with defined copy numbers
- DBS calibrators included in the kit
- Quick turnaround time of ~2 hours
- Compatible with various Real-Time PCR instruments
- 100% clinical sensitivity and specificity



Genes Targeted

- Simultaneous amplification of multiple targets

Targets	Detection Channels
<i>TREC</i> (T-cell Receptor Excision Circle)	Texas Red
<i>KREC</i> (Kappa-deleting Recombination Excision Circle)	Cy5.5
<i>SMN1</i> (Survival Motor Neuron 1)	FAM
<i>SMN2</i> (Survival Motor Neuron 1)	VIC / HEX
B-Globin (Internal control)	Cy5

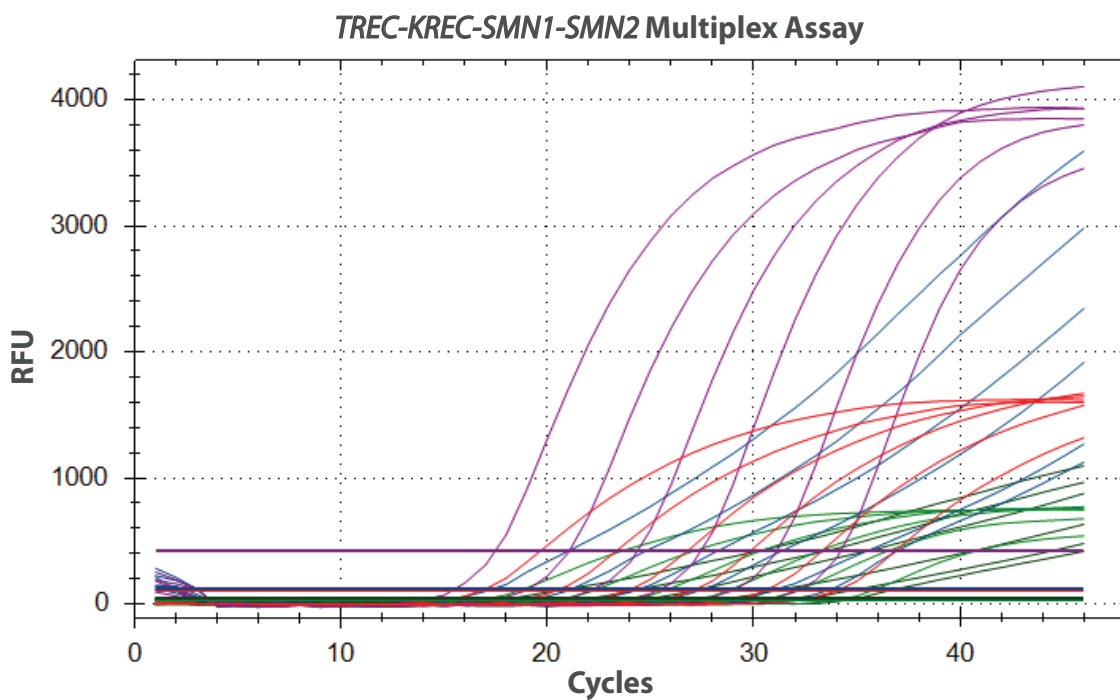
Workflow

- Easy five steps from punching to result



Assay result and performance

- High linearity and PCR efficiency



Limit of Detection

- TREC & KREC* - 2.2 & 4.1 copies/ μ l
- SMN1 & SMN2* - 2.3 & 6.8 copies/ μ l

Ordering Information

Product Code	Format
8100411	96 reactions
8100412	192 reactions
8100413	480 reactions



LABSYSTEMS
DIAGNOSTICS
speaking your language

Labsystems Diagnostics Oy

Tiilitie 3, 01720 Vantaa,
Finland

Phone: +358 20 155 7530

Fax: +358 20 155 7521

www.labsystemsdx.com

sales@labsystemsdx.com