



## Orange 600 Fluorescent Size Standard

User manual

## Description

The Orange 600 Fluorescent Size Standard is a fluorescent labeled ultra-accurate size standard for the reproducible sizing of fragment analysis peaks on any ABI Genetic Analyzer (Thermo Fisher Scientific Inc.) with a five-dye spectral calibration. The standard contains 22 Orange dye-labeled, single -stranded fragments in the 45-595 nucleotides range with basepair lengths of 45, 72, 98, 128, 147, 167, 197, 227, 247,267, 297, 327, 347, 367, 397, 427, 445, 465, 495, 525, 545, 565 and 595.

The size standard can be used for a variety of applications like Microsatellites, MLPA, Fragment Length analysis, Fragment Length Polymorphisms etc. Each of the DNA fragments is labeled with a LIZ® compatible fluorophore resulting in a sharp orange peak under denaturing conditions. With this size standard, your own custom marker fragments can be labeled with the dyes  $FAM^{TM}$ ,  $VIC^{\$}$ ,  $NED^{TM}$  or  $PET^{\$}$  (G5 filterset, Thermo Fisher Scientific Inc.) or with  $FAM^{TM}$ ,  $ZEL^{TM}$ ,  $SOL^{TM}$ ,  $FER^{TM}$  (B5 filterset, Biolegio/Nimagen). Each kit contains enough standard for at least 800 analyses.

## Protocol

Before use, mix the contents of each tube thoroughly and centrifuge briefly to collect the liquid at the bottom of the tube.

Typical loading mix:  $0.5 \mu l$  (diluted) sample,  $0.5 \mu l$  Size Standard and  $9 \mu l$  Super-DI or Hi-Di<sup>TM</sup> Formamide. This cocktail should be considered as a starting point only. Optimize these ratios if necessary, based on your experimental results. If needed, extend the time for datacollection in your instrument software, to obtain collection of the full length up to 600 bp.

