Zeta-Probe® GT Membranes

The Zeta-Probe GT (genomic tested) membrane is a pretested positively charged nylon membrane. The unique binding and handling properties of this membrane make it ideally suited for nucleic acid blotting applications.

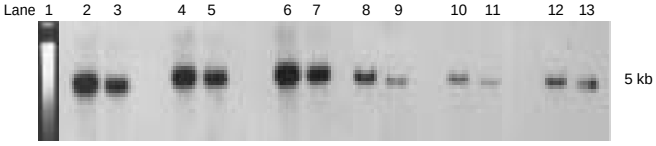
The Zeta-Probe GT membrane quality-control test consists of human DNA digested with Bgl I. After agarose electrophoresis, the DNA is transferred onto the Zeta-Probe GT membrane by Southern and alkaline Southern procedures. We use a labeled p8C plasmid (probe C factor VIII:C)* that contains a 1.8 kb cDNA insert from the human factor VIII:C gene. Our specifications require a clearly visible 5 kb Bgl I fragment in the 5 µg total DNA lane (representing 3 pg of target DNA) after an overnight exposure. In addition, these blots must not have membrane background.

Zeta-Probe GT membranes possess a high tensile strength. They will not shrink, tear or become brittle during transfer, baking, hybridization or reprobing. Zeta-Probe GT membranes are heat resistant, nonflammable and autoclavable. These membranes are naturally hydrophilic with no added wetting agents and are resistant to a wide variety of chemicals, including 100% formamide, 2 M NaOH, 4 M HCl, acetone, most alcohols, DMSO, DMF, and chlorinated aliphatic hydrocarbons. The nominal porosity of Zeta-Probe GT membrane is 0.45 µm. When stored at 23–25 °C, Zeta-Probe GT membranes are stable for at least 1 year.

* Antonarakis, S. E. et al., Hemophilia A. Detection of molecuar defects and of carriers by DNA analysis, N. Engl. J. Med., **313**, 842-848 (1985).

Ordering Information

Catalog #	Description	Size
162-0190	Zeta-Probe GT Membrane	9 x 12 cm, 15 sheets
162-0191	Zeta-Probe GT Membrane	10 x 15 cm, 15 sheets
162-0192	Zeta-Probe GT Membrane	15 x 15 cm, 15 sheets
162-0193	Zeta-Probe GT Membrane	20 x 15 cm, 15 sheets
162-0194	Zeta-Probe GT Membrane	20 x 20 cm, 15 sheets
162-0195	Zeta-Probe GT Membrane	20 x 25 cm, 3 sheets
162-0196	Zeta-Probe GT Membrane	30 cm x 3.3 m, 1 roll
162-0197	Zeta-Probe GT Membrane	20 cm x 3.3 m, 1 rolll



Superior blot results: Bgl I-digested human genomic DNA was transferred to Zeta-Probe GT by Southern or alkaline Southern method. Membranes were hybridized with ^{32}P-labeled plasmid containing a 1.8 kb fragment from a human factor VIII cDNA.This probe hybridizes to a 5 kb Bgl I restriction fragment. Blots were exposed to X-ray film overnight with intensifying screens at -70 ºC.

Lane 1, Ethidium bromide stain of genomic DNA digest, alternating 5 µg and 2.5 µg human genomic DNA digested with Bgl I; lanes 2 and 3, Southern control; lanes 4 and 5, Southern test of membrane side 1; lanes 6 and 7, Southern test of side 2; lanes 8 and 9, alkaline control; lanes 10 and 11, alkaline test of membrane side 1; lanes 12 and 13, alkaline test of side 2.

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