

Application Note:

Olerup SSP[®] HLA typing on Embi Tec Precast Gels

Introduction

Precast gels offer convenience and standardization for improved laboratory efficiency. For typing labs that wish to use precast gels together with the Olerup SSP[®] product line, Olerup SSP AB recommends Embi Tec precast agarose gels.

Our recommendation consists of two different formats from the Embi Tec RunOne™ precast gels. Both agarose gel formats are fully compatible with the Olerup SSP[®] buffer tank and are pre-stained with Ethidium Bromide. Both formats offer separation distances adequate for full DNA fragment separation for interpretation of Olerup SSP[®] typing results.

Embi Tec RunOne™ precast agarose gels are stable at room temperature for up to four months, which minimizes both needed refrigerator space and waste due to expired gels.

Olerup SSP[®] HLA typing on Embi Tec precast gels allows for:

- **Fast results**
 - minimal gel electrophoresis running time recommended: 7 minutes.
- **Reproducibility and reliability**
 - using precast gels will minimize all fluctuation of gel quality; easily achieve high quality results, gel after gel.
- **User friendly**
 - Ready-to-use gels, easy-to-load.
- **Stability**
 - Gels are stable at room temperature for up to four months.

Method

Samples typed with Olerup SSP[®] kits containing both short and long HLA specific fragment sizes have been analyzed by gel electrophoresis on Embi Tec GE-5682 and GE-5642 gels respectively. Electrophoresis has been performed in the Olerup SSP[®] buffer tank at 200V for 7–12 minutes.

Results are visualized immediately after electrophoresis on an UV transilluminator. Accurate identification of internal positive control bands and HLA specific PCR products respectively are easily done.

Conclusion and Recommendation

High-quality precast gels offer a way to standardize result interpretation through reproducibility and reliability. Based on this, Olerup SSP AB are willing to recommend the following formats of Embi Tec precast gels to customers who wish to analyze the Olerup SSP® typing kits on precast gels.

Embi Tec Product No.	Description	Separation Distance	Sample well width/maximum loading volume	Loading compatibility	Recommended running time at 200 V
GE-5682	2% Agarose 0.5X TBE w/EtBr Long Gel 12(8+1) small wells	8.5 mm	3.5 mm/11 µl	8-channel pipette	7 minutes
GE-5642	2% Agarose 0.5X TBE w/EtBr Long Gel 4(24+1) wells	27 mm	3.5 mm/11 µl	Adjustable 8-channel pipette	7–12 minutes

Table 1. Recommended formats of Embi Tec precast gels to be used together with the Olerup SSP® product line. Running parameters should be user defined; the parameters above are suggestions only.

For more information and ordering of the Embi Tec precast gels go to the Embi Tec webpage: www.embitec.com/



www.olerup-ssp.com



www.olerup.com

Olerup SSP® AB is ISO 9001:2008 and ISO 13485:2003 certified.
Olerup SSP® AB is IVD certified in accordance with the requirements of the IVD Directive 98/79/EC.
Olerup SSP® HLA Typing Kits are FDA cleared and licensed by Health Canada.