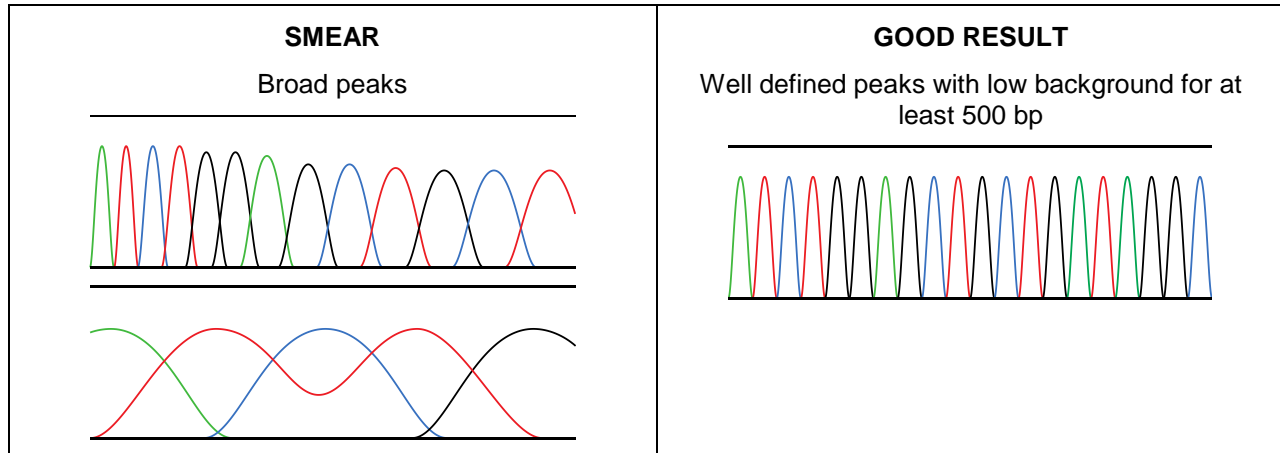




Solutions Guide for Sanger Sequencing Smear

Description

Smears are characterized by broad peaks, indicating poor resolution during capillary electrophoresis.



Troubleshooting

For more assistance, please contact Technical Support at 877-436-3949 ext. 2 or dnaseq@genewiz.com.

POSSIBLE CAUSE	SOLUTION
Capillaries overloaded with sequencing product and possibly template DNA.	<ul style="list-style-type: none"> Reduce the amount of template in the reaction. Please keep in mind that our Sample Submission Guidelines are just that, guidelines. Some sequencing reactions are highly efficient, and thus you may need to submit less template than we suggest to obtain optimal results. If we see a smear, we will automatically dilute the reaction product and rerun it on the sequencer. This reload usually, but not always, leads to improved traces.
Air bubble in capillary.	<ul style="list-style-type: none"> Smears caused by air bubbles should improve upon reload. Bubbles occur infrequently and thus are likely to affect only a small percentage of your samples. If most of your samples exhibit smears, excessive DNA is the likely cause.
Contaminant migrated through the capillary during electrophoresis.	<ul style="list-style-type: none"> Re-purify your template DNA.