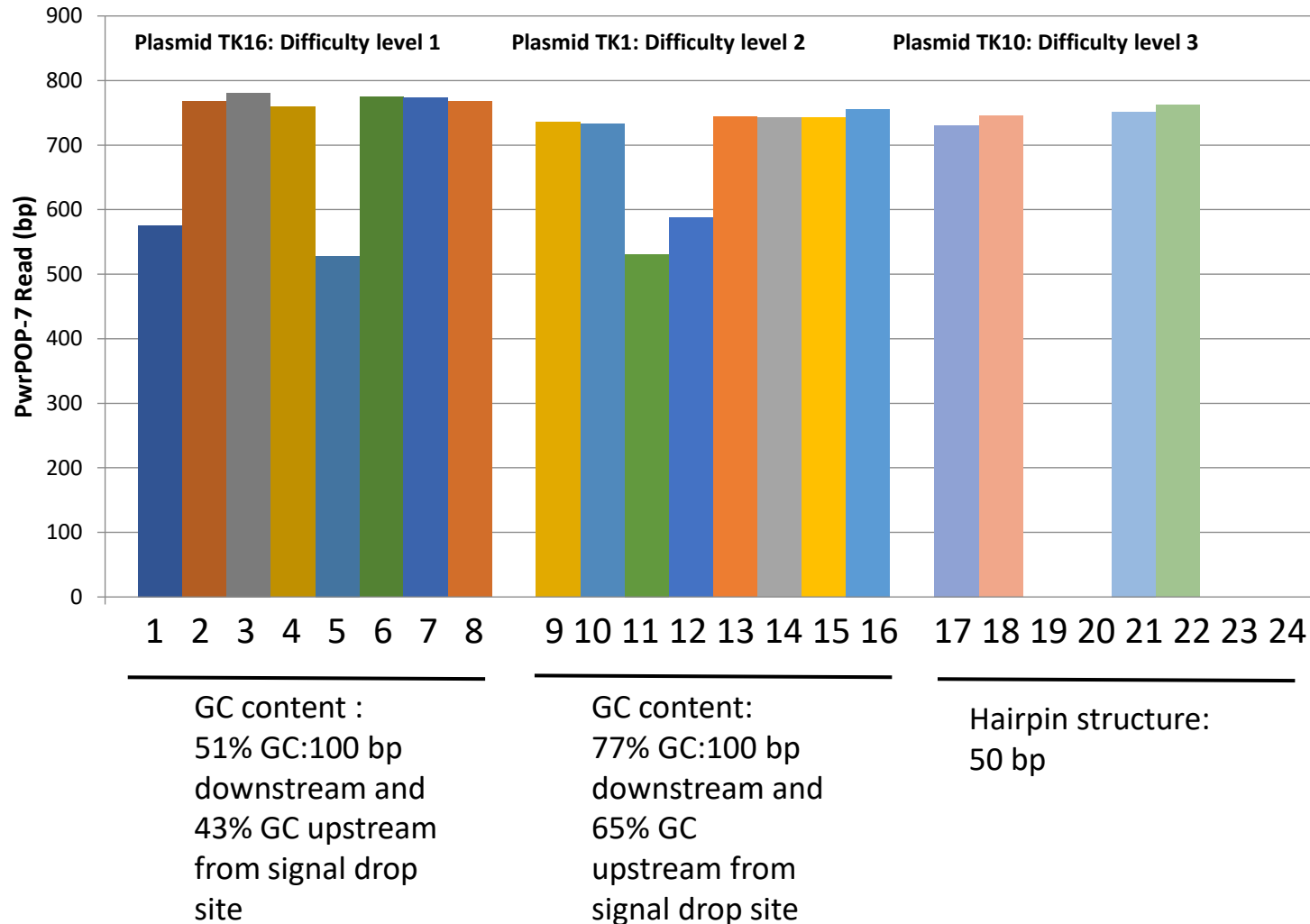




Sequencing Difficult Templates Using PwrPOP-7



- 1, 9, 17: BigDye v3.0 dGTP/ABI Buffer
- 2,10,18: SupreDye v3.1 dGTP/ABI Buffer
- 3,11,19: BigDye v3.1/ABI Buffer
- 4,12,20: SupreDye v3.1/ABI Buffer
- 5,13,21: BigDye v3.0 dGTP/ADS Buffer
- 6,14,22: SupreDye v3.1 dGTP/ADS Buffer
- 7,15,23: BigDye v3.1/ADS Buffer
- 8,16,24: SupreDye v3.1/ADS Buffer

Conclusions:

ADS sequencing buffer has better performance than ABI sequencing buffer

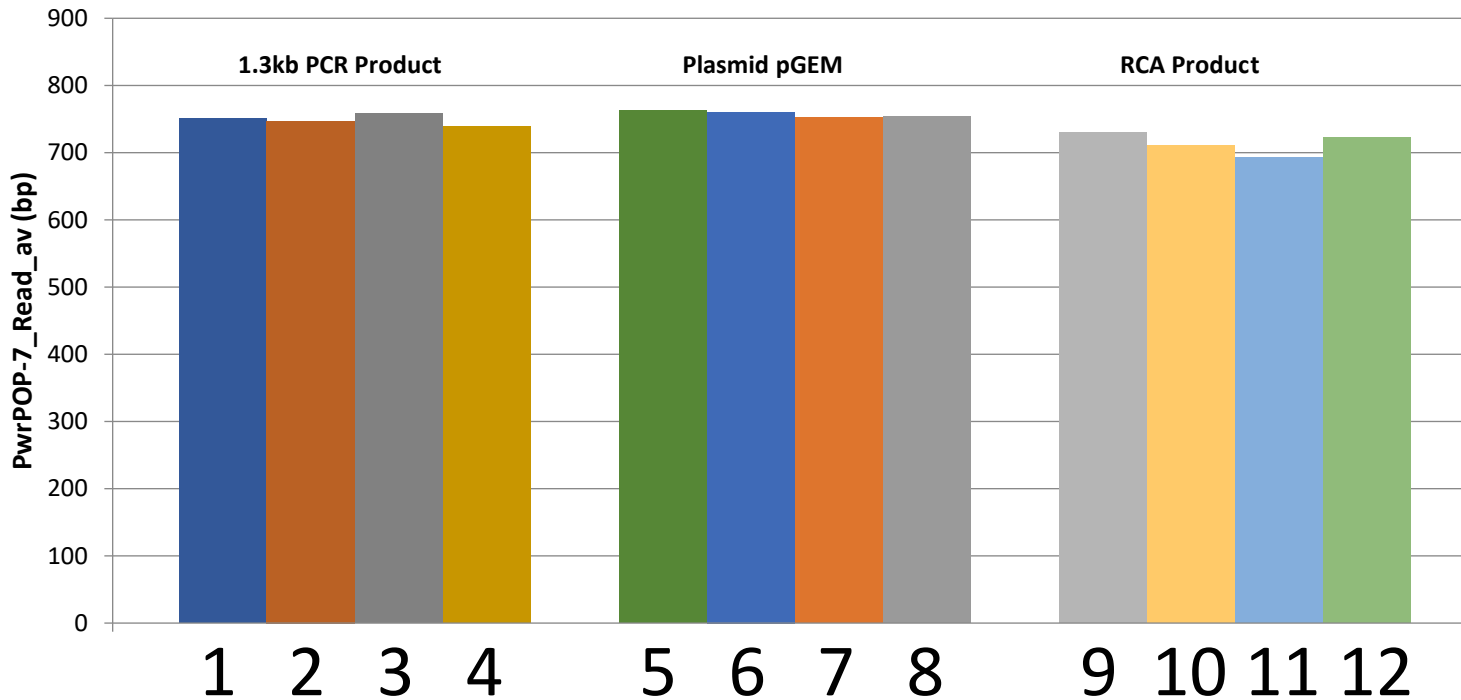
For difficulty level 1 template, both BigDye and SupreDye standard kit reads through although BigDye standard kit/ABI buffer combination has less optimal performance

For difficulty level 2 template, standard BigDye kit /ABI buffer performance compromises, but not SupreDye/ADS buffer

For difficulty level 3 template, standard BigDye or SupreDye kits do not work, dGTP kits need to be used. But BigDye dGTP kit has strong compression problem that misses multiple bases in the hairpin structure



Sequencing Plasmid, PCR Product and RCA Product Using PwrPOP-7



1, 5, 9: BigDye v3.1/ABI Buffer
2,6,10: SupreDye v3.1/ABI Buffer
3,7, 11: BigDye v3.1/ADS Buffer
4,8, 12:SupreDye v3.1/ADS Buffer

Conclusion

SupreDye v3.1 has comparable performance with BigDye v3.1 for different types of templates such as PCR products, plasmids, and RCA products, with reading over 700 bases