iPlex® Assay Design and Ordering

Primers for each locus within an assay set must be designed together for maximum multiplex efficiency. Primer design software is available at mysequenom.com. Assay design can begin with a list of rs numbers for loci of interest. Three primers are required per locus, 2 amplification primers and a single extension primer for allele detection. Investigators are responsible for ordering custom oligos from the vendor of their choice and delivering them to the Genomics Research Core. Please contact Genomics Research Core to confirm primer design and order layout before placing any primer orders.

iPLEX Primer Order Guidelines

1. Please order in plate format. Primers that arrive in tubes will be assessed an additional handling fee based on the extra time required at the rate of $60/hour with a 1 hour minimum charge.
2. Primers must be ordered in deep well plates (800 ul minimum)
3. Request plate names that reflect the project and plate number or primer type. (ex. Project1_PCR1, Project1_UEP1 or Project1_plate1, Project1_plate2...)
4. Primers that are to be pooled into the same plex should be contiguous on the plate in column order. (A1 to H1, A2 to H2 etc...) Multiple plexes can be on one plate and it is not necessary to leave empty wells between plexes, just please DON'T mix plexes up within the plate, or place them in row order.
5. Desalting clean up sufficient
6. PCR primers can be ordered at 25 nmolar scale for up to 20 plates and should be concentration normalized to 100 uM .
7. Extend (UEP) primers must be ordered at 200 or 250 nmolar scale (whatever is available from your vendor) for up to 10 plates and concentration normalized to 400 uM in water. For larger project, order at 1 uM scale concentration normalized to 1200 uM in water

If your vendor cannot meet these exact concentration targets, oligos must be dry.

8. Sequence names for each oligo MUST be unique. Please append the primer designation to the rs#. (ex. rs#_PCR1, rs#_PCR2, rs#_UEP) or use the designation from assay design software Order formatted export.
9. Send electronic version of primer manufacture documentation provided by vendor to Genomics Research Core by email.