



TaqMan® multiplex assay design— we help make it easier

The first step in developing a multiplex PCR is to correctly design primers and probes for each target to minimize possible interactions and obtain maximum performance for each PCR. This step is crucial and will require time and expertise, but will minimize follow-up optimization. We provide tools and services to help you achieve success.

Determine how to convert your assays

If you already use TaqMan® Assays or other types of assays, go to lifetechnologies.com/multiplexqpcr to determine which assays need to be converted in order to be successfully multiplexed.

Based on the type of assays you use, our multiplex assay conversion tool will recommend one of the following options:

- Keep your assay as is
- Reorder with a different dye—order online if it's a pre-designed assay, or contact specialoligos@lifetech.com to obtain an order ID for a custom or Custom Plus TaqMan® Assay
- Redesign the assay to convert a TaqMan® MGB probe to a TaqMan® QSY probe using Primer Express® Software, or use our Custom Services to have the assay redesigned (fees apply)
- Contact our Custom Services to redesign any pre-designed or Custom Plus TaqMan® Assays (fees apply—see next page)

Select your existing assays and get conversion recommendation

| Existing assay ⓘ | Recommended for multiplexing ⓘ | | | | | |
|------------------|--------------------------------|----------|----------|---------------------------|--------------|--------------|
| | Type ⓘ | Reporter | Quencher | Action | New reporter | New Quencher |
| Assay 1 | Pre-designed ▾ | FAM™ ▾ | MGB ▾ | 🔄 Reorder ⓘ | VIC® | MGB |
| Assay 2 | Pre-designed ▾ | FAM™ ▾ | MGB ▾ | ✉ Contact custom services | ABY® | QSY® |
| Assay 3 | Custom Plus ▾ | FAM™ ▾ | MGB ▾ | ✓ Keep | FAM™ | MGB |
| Assay 4 | Probe + Primer ▾ | FAM™ ▾ | MGB ▾ | 🔄 Redesign ⓘ | JUN® | QSY® |

[Get recommendation](#)

Multiplex assay conversion tool

Simply select your application, the level of multiplexing, and the type of assays (with reporter and quencher) you use today. Then click “Get recommendation” to determine how best to adapt each assay for multiplexing.

Delegate multiplex real-time PCR assay design to our expert design services

Don't have the time to design assays? Our Custom Services will allow you to delegate primer and probe design to our expert team, who have years of experience designing TaqMan® assays.

The service includes:

- Identification of splice sites and SNPs on the target sequence
- Redesign of probes and, if necessary, primers, with QSY quencher parameters
- Mapping of the probes and primers to the current transcript and/or genomic database
- Identification of potential probe and primer interactions
- Elimination of overlapping amplicons
- Selection of best multiplex probe and primer candidates
- Delivery of primer and probe IDs for online ordering[†]

| Species | Assay design pricing* (\$) | | | |
|-----------------------|----------------------------|---------|---------|---------|
| | Singleplex | 2-plex | 3-plex | 4-plex |
| Human Mouse Rat | \$275 | \$550 | \$825 | \$1,100 |
| Other** | Inquire | Inquire | Inquire | Inquire |

*Excludes cost of oligo synthesis. Assumes all targets are either for gene expression or SNP genotyping and all within the same species.

**Inquire for assay design pricing for species other than human, mouse, or rat. Also inquire for bulk order pricing.

Contact Custom Services at
custom.solutions@thermofisher.com

[†] Optimization requires primer concentration adjustment so we recommend ordering primers and TaqMan® probes as separate oligonucleotides.

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