

Standard PCR

| Taq DNA Polymerase 5 U/μl For routine PCR applications, which require high yield and reliable DNA amplification. | | | | | |
|---|------------|------------|-------------|-------------|------------|
| Units | 500 | 1 000 | 2 500 | 5 000 | 10 000 |
| Without Buffer | A110003 | A110004 | A110006 | A110007 | A110008 |
| With 10x Ammonium Buffer and extra MgCl₂ (25 mM) | | | | | |
| • 15 mM MgCl ₂ | A111103 | A111104 | A111106 | A111107 | A111108 |
| • Mg ²⁺ free | A111203 | A111204 | A111206 | A111207 | A111208 |
| • Tween free | A111403 | A111404 | A111406 | A111407 | A111408 |
| • Mg ²⁺ free, Tween free | A111503 | A111504 | A111506 | A111507 | A111508 |
| With 10x Standard Buffer and extra MgCl₂ (25 mM) | | | | | |
| • 15 mM MgCl ₂ | A112103 | A112104 | A112106 | A112107 | A112108 |
| • Mg ²⁺ free | A112203 | A112204 | A112206 | A112207 | A112208 |
| • Tween free | A112403 | A112404 | A112406 | A112407 | A112408 |
| • Mg ²⁺ free, Tween free | A112503 | A112504 | A112506 | A112507 | A112508 |
| With 10x Combination Buffer and extra MgCl₂ (25 mM) | | | | | |
| • 15 mM MgCl ₂ | A113103 | A113104 | A113106 | A113107 | A113108 |
| • Mg ²⁺ free | A113203 | A113204 | A113206 | A113207 | A113208 |
| • Tween free | A113403 | A113404 | A113406 | A113407 | A113408 |
| • Mg ²⁺ free, Tween free | A113503 | A113504 | A113506 | A113507 | A113508 |
| With 5x PCR Buffer RED (7.5 mM MgCl₂) | A111803 | A111804 | A111806 | A111807 | A111808 |
| With two buffers of choice and extra MgCl₂ (25 mM) | | | | | |
| 10x Ammonium Buffer (15 mM MgCl ₂) + 10x Standard Buffer (15 mM MgCl ₂) | A114103 | A114104 | A114106 | A114107 | A114108 |
| 10x Ammonium Buffer (15 mM MgCl ₂) + 10x Combination Buffer (15 mM MgCl ₂) | A115103 | A115104 | A115106 | A115107 | A115108 |
| Volume | | | | | |
| Enzyme | 1 x 100 μl | 2 x 100 μl | 5 x 100 μl | 10 x 100 μl | 3 x 667 μl |
| Each 10x buffer if included | 1 x 1.5 ml | 2 x 1.5 ml | 5 x 1.5 ml | 3 x 5 ml | 6 x 5 ml |
| Each 5x buffer if included | 4 x 1.5 ml | 7 x 1.5 ml | 17 x 1.5 ml | 10 x 5 ml | 20 x 5 ml |
| MgCl ₂ if included | 1 x 1.5 ml | 2 x 1.5 ml | 5 x 1.5 ml | 3 x 5 ml | 6 x 5 ml |
| Taq DNA Polymerase RED 5 U/μl With inert red dye for convenient identification of the presence of enzyme and confirmation of complete mixing. For routine PCR applications, which require high yield and reliable DNA amplification. | | | | | |
| Units | 500 | 1 000 | 2 500 | 5 000 | 10 000 |
| Without Buffer | A200003 | A200004 | A200006 | A200007 | A200008 |
| With 10x Ammonium Buffer and extra MgCl₂ (25 mM) | | | | | |
| • 15 mM MgCl ₂ | A201103 | A201104 | A201106 | A201107 | A201108 |
| • Mg ²⁺ free | A201203 | A201204 | A201206 | A201207 | A201208 |
| • Tween free | A201403 | A201404 | A201406 | A201407 | A201408 |
| • Mg ²⁺ free, Tween free | A201503 | A201504 | A201506 | A201507 | A201508 |
| With 10x Standard Buffer and extra MgCl₂ (25 mM) | | | | | |
| • 15 mM MgCl ₂ | A202103 | A202104 | A202106 | A202107 | A202108 |
| • Mg ²⁺ free | A202203 | A202204 | A202206 | A202207 | A202208 |
| • Tween free | A202403 | A202404 | A202406 | A202407 | A202408 |
| • Mg ²⁺ free, Tween free | A202503 | A202504 | A202506 | A202507 | A202508 |
| With 10x Combination Buffer and extra MgCl₂ (25 mM) | | | | | |
| • 15 mM MgCl ₂ | A203103 | A203104 | A203106 | A203107 | A203108 |
| • Mg ²⁺ free | A203203 | A203204 | A203206 | A203207 | A203208 |
| • Tween free | A203403 | A203404 | A203406 | A203407 | A203408 |
| • Mg ²⁺ free, Tween free | A203503 | A203504 | A203506 | A203507 | A203508 |
| With two buffers of choice and extra MgCl₂ (25 mM) | | | | | |
| 10x Ammonium Buffer (15 mM MgCl ₂) + 10x Standard Buffer (15 mM MgCl ₂) | A204103 | A204104 | A204106 | A204107 | A204108 |
| 10x Ammonium Buffer (15 mM MgCl ₂) + 10x Combination Buffer (15 mM MgCl ₂) | A205103 | A205104 | A205106 | A205107 | A205108 |
| Volume | | | | | |
| Enzyme | 1 x 100 μl | 2 x 100 μl | 5 x 100 μl | 10 x 100 μl | 3 x 667 μl |
| Each buffer if included | 1 x 1.5 ml | 2 x 1.5 ml | 5 x 1.5 ml | 3 x 5 ml | 6 x 5 ml |
| MgCl ₂ if included | 1 x 1.5 ml | 2 x 1.5 ml | 5 x 1.5 ml | 3 x 5 ml | 6 x 5 ml |

Hot Start PCR

| TEMPase Hot Start DNA Polymerase 5 U/μl For reaction set-up at room temperature, superior amplification and high specificity. | | | | | |
|--|------------|------------|------------|-------------|------------|
| Units | 500 | 1 000 | 2 500 | 5 000 | 10 000 |
| Without Buffer | A220003 | A220004 | A220006 | A220007 | A220008 |
| With 10x Ammonium Buffer and extra MgCl₂ (25 mM) | | | | | |
| • 15 mM MgCl ₂ | A221103 | A221104 | A221106 | A221107 | A221108 |
| • Mg ²⁺ free | A221203 | A221204 | A221206 | A221207 | A221208 |
| • Tween free | A221403 | A221404 | A221406 | A221407 | A221408 |
| • Mg ²⁺ free, Tween free | A221503 | A221504 | A221506 | A221507 | A221508 |
| With 10x Combination Buffer and extra MgCl₂ (25 mM) | | | | | |
| • 15 mM MgCl ₂ | A223103 | A223104 | A223106 | A223107 | A223108 |
| • Mg ²⁺ free | A223203 | A223204 | A223206 | A223207 | A223208 |
| • Tween free | A223403 | A223404 | A223406 | A223407 | A223408 |
| • Mg ²⁺ free, Tween free | A223503 | A223504 | A223506 | A223507 | A223508 |
| With two buffers and extra MgCl₂ (25 mM) | | | | | |
| 10x Ammonium Buffer (15 mM MgCl ₂) + 10x Combination Buffer (15 mM MgCl ₂) | A225103 | A225104 | A225106 | A225107 | A225108 |
| With 5x PCR Buffer RED (7.5 mM MgCl ₂) | A221803 | A221804 | A221806 | A221807 | A221808 |
| Volume | | | | | |
| Enzyme | 1 x 100 μl | 2 x 100 μl | 5 x 100 μl | 10 x 100 μl | 3 x 667 μl |
| Each 10x buffer if included | 1 x 1.5 ml | 2 x 1.5 ml | 5 x 1.5 ml | 3 x 5 ml | 6 x 5 ml |
| Each 5x buffer if included | 2 x 1.5 ml | 4 x 1.5 ml | 9 x 1.5 ml | 5 x 5 ml | 10 x 5 ml |
| MgCl ₂ if included | 1 x 1.5 ml | 2 x 1.5 ml | 5 x 1.5 ml | 3 x 5 ml | 6 x 5 ml |

Glycerol Free Products

| Taq DNA Polymerase Glycerol Free 5 U/μl For automation and freeze-drying. For routine PCR applications, which require high yield and reliable DNA amplification. | | | | | |
|---|---------|---------|---------|---------|---------|
| Units | 500 | 1 000 | 2 500 | 5 000 | 10 000 |
| Without Buffer | A100003 | A100004 | A100006 | A100007 | A100008 |
| With 10x Ammonium Buffer and extra MgCl₂ (25 mM) | | | | | |
| • 15 mM MgCl ₂ | A101103 | A101104 | A101106 | A101107 | A101108 |
| • Mg ²⁺ free | A101203 | A101204 | A101206 | A101207 | A101208 |
| • Tween free | A101403 | A101404 | A101406 | A101407 | A101408 |
| • Mg ²⁺ free, Tween free | A101503 | A101504 | A101506 | A101507 | A101508 |
| With 10x Standard Buffer and extra MgCl₂ (25 mM) | | | | | |
| • 15 mM MgCl ₂ | A102103 | A102104 | A102106 | A102107 | A102108 |
| • Mg ²⁺ free | A102203 | A102204 | A102206 | A102207 | A102208 |
| • Tween free | A102403 | A102404 | A102406 | A102407 | A102408 |
| • Mg ²⁺ free, Tween free | A102503 | A102504 | A102506 | A102507 | A102508 |
| With 10x Combination Buffer and extra MgCl₂ (25 mM) | | | | | |
| • 15 mM MgCl ₂ | A103103 | A103104 | A103106 | A103107 | A103108 |
| • Mg ²⁺ free | A103203 | A103204 | A103206 | A103207 | A103208 |
| • Tween free | A103403 | A103404 | A103406 | A103407 | A103408 |
| • Mg ²⁺ free, Tween free | A103503 | A103504 | A103506 | A103507 | A103508 |
| With two buffers of choice and extra MgCl₂ (25 mM) | | | | | |
| 10x Ammonium Buffer (15 mM MgCl ₂) + 10x Standard Buffer (15 mM MgCl ₂) | A104103 | A104104 | A104106 | A104107 | A104108 |
| 10x Ammonium Buffer (15 mM MgCl ₂) + 10x Combination Buffer (15 mM MgCl ₂) | A105103 | A105104 | A105106 | A105107 | A105108 |

| Taq DNA Polymerase Glycerol Free 50 U/μl For automation and freeze-drying. For routine PCR applications, which require high yield and reliable DNA amplification. | | | |
|--|------------|----------|-----------|
| Units | 25 000 | 250 000 | 2 000 000 |
| Without Buffer | A490010 | A490012 | A490044 |
| Volume | | | |
| Enzyme | 1 x 0.5 ml | 1 x 5 ml | 8 x 5 ml |

| TEMPase Hot Start DNA Polymerase Glycerol Free 5 U/μl For automation and freeze-drying, for reaction setup at room temperature, superior amplification and high specificity. | | | | | |
|---|------------|------------|------------|-------------|------------|
| Units | 500 | 1 000 | 2 500 | 5 000 | 10 000 |
| Without Buffer | A240003 | A240004 | A240006 | A240007 | A240008 |
| With 10x Ammonium Buffer and extra MgCl₂ (25 mM) | | | | | |
| • 15 mM MgCl ₂ | A241103 | A241104 | A241106 | A241107 | A241108 |
| • Mg ²⁺ free | A241203 | A241204 | A241206 | A241207 | A241208 |
| • Tween free | A241403 | A241404 | A241406 | A241407 | A241408 |
| • Mg ²⁺ free, Tween free | A241503 | A241504 | A241506 | A241507 | A241508 |
| With 10x Combination Buffer and extra MgCl₂ (25 mM) | | | | | |
| • 15 mM MgCl ₂ | A243103 | A243104 | A243106 | A243107 | A243108 |
| • Mg ²⁺ free | A243203 | A243204 | A243206 | A243207 | A243208 |
| • Tween free | A243403 | A243404 | A243406 | A243407 | A243408 |
| • Mg ²⁺ free, Tween free | A243503 | A243504 | A243506 | A243507 | A243508 |
| With two buffers and extra MgCl₂ (25 mM) | | | | | |
| 10x Ammonium Buffer (15 mM MgCl ₂) + 10x Combination Buffer (15 mM MgCl ₂) | A245103 | A245104 | A245106 | A245107 | A245108 |
| Volume | | | | | |
| Enzyme | 1 x 100 μl | 2 x 100 μl | 5 x 100 μl | 10 x 100 μl | 3 x 667 μl |
| Each buffer if included | 1 x 1.5 ml | 2 x 1.5 ml | 5 x 1.5 ml | 3 x 5 ml | 6 x 5 ml |
| MgCl ₂ if included | 1 x 1.5 ml | 2 x 1.5 ml | 5 x 1.5 ml | 3 x 5 ml | 6 x 5 ml |

Standard PCR Master Mix

| Reactions (50 μl) | 100 | 500 | 2 500 | 5 000 | 10 000 |
|--|-------------|--------------|--------------|-----------|-----------|
| Taq OptiMix CLEAR 2x Master Mix An optimized Taq master mix with increased specificity | | | | | |
| • 1.5 mM MgCl ₂ final conc. | A370501 | A370503 | A370506 | A370507 | - |
| Taq DNA Polymerase 2x Master Mix Suitable for standard tests due to reduced setup time and increased reproducibility. | | | | | |
| • 1.5 mM MgCl ₂ final conc. | A140301 | A140303 | A140306 | A140307 | A140308 |
| • 2 mM MgCl ₂ final conc. | A150301 | A150303 | A150306 | A150307 | A150308 |
| Taq DNA Polymerase 2x Master Mix RED - for direct loading With inert red dye and stabilizers to allow direct loading to agarose and SDS DNA gels. | | | | | |
| • 1.5 mM MgCl ₂ final conc. | A180301 | A180303 | A180306 | A180307 | A180308 |
| • 2 mM MgCl ₂ final conc. | A190301 | A190303 | A190306 | A190307 | A190308 |
| Volume | | | | | |
| 2x master mixes | 2 x 1.25 ml | 10 x 1.25 ml | 50 x 1.25 ml | 25 x 5 ml | 28 x 9 ml |

Hot Start PCR Master Mix and Master Mix BLUE

| TEMPase Master Mix For reaction setup at room temperature, superior amplification and high specificity. Recommended for detection of low copy number targets. | | | | | | |
|--|-------------|--------------|--------------|--------------|-----------|-----------|
| Reactions (50 μl) | 100 | 500 | 1 000 | 2 500 | 5 000 | 10 000 |
| TEMPase DNA Polymerase 2x Master Mix A (based on Ammonium Buffer) | | | | | | |
| • 1.5 mM MgCl ₂ final conc. | A230301 | A230303 | A230304 | A230306 | A230307 | A230308 |
| TEMPase DNA Polymerase 2x Master Mix C (based on Combination Buffer) | | | | | | |
| • 1.5 mM MgCl ₂ final conc. | A230701 | A230703 | A230704 | A230706 | A230707 | A230708 |
| TEMPase Master Mix BLUE - for direct loading With inert blue dye and stabilizers to allow direct loading to agarose and SDS DNA gels. | | | | | | |
| TEMPase DNA Polymerase 2x Master Mix A BLUE | | | | | | |
| • 1.5 mM MgCl ₂ final conc. | A290401 | A290403 | A290404 | A290406 | A290407 | A290408 |
| TEMPase DNA Polymerase 2x Master Mix C BLUE | | | | | | |
| • 1.5 mM MgCl ₂ final conc. | A290801 | A290803 | A290804 | A290806 | A290807 | A290808 |
| Volume | | | | | | |
| 2x master mixes | 2 x 1.25 ml | 10 x 1.25 ml | 20 x 1.25 ml | 50 x 1.25 ml | 25 x 5 ml | 28 x 9 ml |
| MgCl ₂ if included | 1 x 1.5 ml | 1 x 1.5 ml | 2 x 1.5 ml | 3 x 1.5 ml | 2 x 5 ml | 4 x 5 ml |

Multiplex PCR Master Mix

Multiplex TEMPase 2x Master Mix with extra MgCl₂ (25 mM) For multiplex PCR reaction setup at room temperature, allowing to apply multiple primer sets within a single tube.

| Reactions (50 µl) | 100 | 500 | 1 000 | 2 500 | 5 000 | 10 000 |
|--------------------------------------|-------------|--------------|--------------|--------------|-----------|-----------|
| • 3 mM MgCl ₂ final conc. | A260301 | A260303 | A260304 | A260306 | A260307 | A260308 |
| Volume | | | | | | |
| 2x master mixes | 2 x 1.25 ml | 10 x 1.25 ml | 20 x 1.25 ml | 50 x 1.25 ml | 25 x 5 ml | 28 x 9 ml |
| MgCl ₂ | 1 x 1.5 ml | 1 x 1.5 ml | 2 x 1.5 ml | 3 x 1.5 ml | 2 x 5 ml | 4 x 5 ml |

GC-rich PCR

GC-rich DNA Target Kit: TEMPase Hot Start DNA Polymerase with two special buffers and extra MgCl₂ (25 mM)
Optimized to successfully amplify difficult GC-rich DNA targets that regular master mixes cannot.

| Units | 500 | 1 000 | 2 500 | 5 000 | 10 000 |
|------------------------------------|------------|------------|------------|-------------|------------|
| 4x GC Buffer I and 4x GC Buffer II | A227103 | A227104 | A227106 | A227107 | A227108 |
| Volume | | | | | |
| Enzyme | 1 x 100 µl | 2 x 100 µl | 5 x 100 µl | 10 x 100 µl | 3 x 667 µl |
| Each 10x buffer if included | 1 x 1.5 ml | 2 x 1.5 ml | 5 x 1.5 ml | 3 x 5 ml | 6 x 5 ml |
| Each 5x buffer if included | 2 x 1.5 ml | 4 x 1.5 ml | 9 x 1.5 ml | 5 x 5 ml | 10 x 5 ml |
| MgCl ₂ if included | 1 x 1.5 ml | 2 x 1.5 ml | 5 x 1.5 ml | 3 x 5 ml | 6 x 5 ml |

GC-rich TEMPase Master Mix Optimized to successfully amplify difficult GC-rich DNA targets that regular master mixes cannot.

| Reactions (50 µl) | 100 | 500 | 1 000 | 2 500 | 5 000 | 10 000 |
|--|-------------|--------------|--------------|--------------|-----------|-----------|
| GC TEMPase 2x Master Mix I | | | | | | |
| • 1.5 mM MgCl ₂ final conc. | A331701 | A331703 | A331704 | A331706 | A331707 | A331708 |
| GC TEMPase 2x Master Mix II | | | | | | |
| • 1.5 mM MgCl ₂ final conc. | A332701 | A332703 | A332704 | A332706 | A332707 | A332708 |
| Volume | | | | | | |
| 2x master mixes | 2 x 1.25 ml | 10 x 1.25 ml | 20 x 1.25 ml | 50 x 1.25 ml | 25 x 5 ml | 28 x 9 ml |
| MgCl ₂ if included | 1 x 1.5 ml | 1 x 1.5 ml | 2 x 1.5 ml | 3 x 1.5 ml | 2 x 5 ml | 4 x 5 ml |

High Fidelity PCR

AQ97 High Fidelity DNA Polymerase 2 U/µl High fidelity proofreading DNA Polymerase featuring robust amplification on AT-rich, GC-rich and long DNA targets. Recommended for cloning and mutagenesis.

| Units | 100 | 500 | 1 000 | 2 500 |
|---|------------|------------|------------|-------------|
| With 5x AQ97 Buffer and extra MgCl ₂ (25 mM) | A767501 | A767503 | A767504 | A767506 |
| Volume | | | | |
| Enzyme | 1 x 50 µl | 1 x 250 µl | 2 x 250 µl | 5 x 250 µl |
| Buffer | 2 x 1.5 ml | 4 x 1.5 ml | 8 x 1.5 ml | 18 x 1.5 ml |
| MgCl ₂ | 1 x 1.5 ml | 1 x 1.5 ml | 2 x 1.5 ml | 5 x 1.5 ml |

AQ97 High Fidelity DNA Polymerase 2x Master Mix High fidelity proofreading DNA Polymerase featuring robust amplification on AT-rich, GC-rich and long DNA targets. Recommended for cloning and mutagenesis.

| Reactions (50 µl) | 100 | 500 | 2 500 | 5000 |
|---|-------------|--------------|--------------|-----------|
| AQ97 High Fidelity DNA Polymerase 2x Master Mix | A770101 | A770103 | A770106 | A770107 |
| Volume | | | | |
| 2x master mix | 2 x 1.25 ml | 10 x 1.25 ml | 50 x 1.25 ml | 25 x 5 ml |

AQ97 Hot Start High Fidelity DNA Polymerase 2 U/µl Ideal for cloning or amplification of difficult/long amplicons. Decreased run-time due to high-speed polymerase. Reaction setup can be performed at room temperature.

| Units | 100 | 500 | 1 000 | 2 500 |
|---|------------|------------|------------|-------------|
| With 5x AQ97 Buffer and extra MgCl ₂ (25 mM) | A787501 | A787503 | A787504 | A787506 |
| Volume | | | | |
| Enzyme | 1 x 50 µl | 1 x 250 µl | 2 x 250 µl | 5 x 250 µl |
| Buffer | 2 x 1.5 ml | 4 x 1.5 ml | 8 x 1.5 ml | 18 x 1.5 ml |
| MgCl ₂ | 1 x 1.5 ml | 1 x 1.5 ml | 2 x 1.5 ml | 5 x 1.5 ml |

| | | | | |
|--|-------------|--------------|--------------|-------------|
| AQ97 Hot Start High Fidelity DNA Polymerase 2x Master Mix Ideal for cloning or amplification of difficult/long amplicons. Decreased run-time due to high-speed polymerase. Reaction setup can be performed at room temperature. | | | | |
| Reactions (50 µl) | 100 | 500 | 2 500 | 5000 |
| AQ97 Hot Start High Fidelity DNA Polymerase 2x Master Mix | A790801 | A790803 | A790806 | A790807 |
| Volume | | | | |
| 2x master mix | 2 x 1.25 ml | 10 x 1.25 ml | 50 x 1.25 ml | 25 x 5 ml |

| | | | | |
|--|------------|------------|--------------|--------------|
| AccuPOL DNA Polymerase 2.5 U/µl High fidelity proofreading DNA polymerase, recommended for cloning, mutagenesis and when blunt ends are required. | | | | |
| Units | 250 | 500 | 1 000 | 2 500 |
| Without Buffer | A210002 | A210003 | A210004 | A210006 |
| With 10x Ammonium Buffer and extra MgCl₂ (25 mM) | | | | |
| • 15 mM MgCl ₂ | A211102 | A211103 | A211104 | A211106 |
| • Mg ²⁺ free | A211202 | A211203 | A211204 | A211206 |
| • Tween free | A211402 | A211403 | A211404 | A211406 |
| • Mg ²⁺ free, Tween free | A211502 | A211503 | A211504 | A211506 |
| Volume | | | | |
| Enzyme | 1 x 100 µl | 1 x 200 µl | 2 x 200 µl | 5 x 200 µl |
| Each buffer if included | 1 x 1.5 ml | 1 x 1.5 ml | 2 x 1.5 ml | 5 x 1.5 ml |
| MgCl ₂ if included | 1 x 1.5 ml | 1 x 1.5 ml | 2 x 1.5 ml | 5 x 1.5 ml |

Genotyping

| | | |
|---|-------------|-------------|
| Reactions (100 µl) | 100 | 500 |
| Q-Extract DNA Extraction PCR Kit* The optimal solution for genotyping incl. easy DNA extraction. | | |
| • With Taq DNA Polymerase 2x Master Mix RED | A570001 | A570004 |
| Q-Extract DNA Extraction Hot Start PCR Kit* The optimal solution for genotyping incl. easy DNA extraction. | | |
| • With TEMPase Hot Start DNA Polymerase 2x Master Mix A BLUE | A574401 | A574404 |
| Volume | | |
| Q-Extract DNA Extraction Solution | 1 x 10 ml | 5 x 10 ml |
| Enzyme | 1 x 1.25 ml | 5 x 1.25 ml |

*Q-Extract DNA Extraction Solution is also available as a separate product. See page 7.

Lyophilized PCR

| | | | |
|--|------------|--------------|--------------|
| Reactions (25 µl) | 500 | 1 000 | 2 500 |
| DryTech TEMPase 5x Master Mix Clear with 5x DryTech Buffer Clear Lyophilized TEMPase Master Mix for reaction setup at room temperature. Shipping at ambient temperature. | | | |
| 2 mM MgCl ₂ final conc. | A747203 | A747204 | A747206 |
| DryTech TEMPase 5x Master Mix Green with 5x DryTech Buffer Green Lyophilized TEMPase Master Mix with green dye for direct loading. Shipping at ambient temperature. | | | |
| 2 mM MgCl ₂ final conc. | A747303 | A747304 | A747306 |
| Volume | | | |
| 5x master mixes | 4 vials | 8 vials | 20 vials |
| 5x buffer | 2 x 1.3 ml | 4 x 1.3 ml | 10 x 1.3 ml |

Real-Time Master Mix

| | | |
|--|------------|--------------|
| RealQ Plus 2x Master Mix Optimized all-in-one master mix for real-time PCR, well suited for quantitation, detection of gene expression, SNP analysis, pathogen detection and multiplex PCR (for probe). | | |
| Reactions (25 µl) | 400 | 4 000 |
| Green | | |
| • Without ROX | A323402 | A323406 |
| • Low ROX | A324402 | A324406 |
| • High ROX | A325402 | A325406 |

| for Probe | | |
|---------------|-------------|--------------|
| • Without ROX | A313402 | A313406 |
| • Low ROX | A314402 | A314406 |
| • High ROX | A315402 | A315406 |
| Volume | | |
| 2x Master Mix | 4 x 1.25 ml | 40 x 1.25 ml |

| RealQ Fast 2x Master Mix Ready-to-use Master Mix for real-time PCR. Recommended for sensitive detection and accurate quantitation. Fast and super-fast programs enable low run times. | | | | |
|--|-------------|--------------|--------------|--------------|
| Reactions (25 µl) | 500 | 1000 | 2500 | 5000 |
| RealQ Fast 2x Master Mix, Green | A463403 | A463404 | A463411 | A463412 |
| Volume | | | | |
| 2x Master Mix | 5 x 1.25 ml | 10 x 1.25 ml | 25 x 1.25 ml | 50 x 1.25 ml |

RT-PCR

| One-step RT qPCR Kit Sensitive detection of low-copy RNA templates including virus RNA | | | |
|---|-------------|-------------|-------------|
| Reactions (20 µl) | 100 | 200 | 2000 |
| • With 4x qPCR Mix, 20x RT Mix and ROX | A833301 | A833302 | A833305 |
| Volume | | | |
| 20x RT Mix | 1 x 0.1 ml | 1 x 0.2 ml | 10 x 0.2 ml |
| 4x RT qPCR Mix | 1 x 0.5 ml | 1 x 1.0 ml | 10 x 1.0 ml |
| ROX internal reference dye | 1 x 0.05 ml | 1 x 0.05 ml | 2 x 0.05 ml |

Nucleotides

| dNTP Mix: dATP, dCTP, dGTP and dTTP equimolar mixed in one tube | | | | |
|--|------------|------------|----------|----------|
| Concentration | A500004 | A500007 | - | - |
| 100 mM (25 mM of each: dATP, dCTP, dGTP and dTTP) | A500004 | A500007 | - | - |
| 40 mM (10 mM of each: dATP, dCTP, dGTP and dTTP) | A502004 | A502007 | - | - |
| 10 mM (2,5 mM of each: dATP, dCTP, dGTP and dTTP) | - | - | A503004 | A503005 |
| Volume | | | | |
| dNTP Mix | 2 x 0.5 ml | 8 x 0.5 ml | 2 x 1 ml | 5 x 1 ml |

| dNTP Set: One tube of each dATP, dCTP, dGTP and dTTP, 100 mM each | | | | |
|--|-------------|-------------|--------------|----------|
| | A511104 | A511107 | A511109 | A511120 |
| Volume | | | | |
| Each dNTP in the set | 1 x 0.25 ml | 4 x 0.25 ml | 20 x 0.25 ml | 2 x 1 ml |
| Total number of tubes | 4 | 16 | 80 | 8 |

| Single dNTPs: One tube of one specific dNTP | |
|--|-------------|
| dATP, 100 mM | A521102 |
| dCTP, 100 mM | A521202 |
| dGTP, 100 mM | A521302 |
| dTTP, 100 mM | A521402 |
| Volume | |
| dNTP | 1 x 0.25 ml |

Buffers, Special Buffers, and MgCl₂

| 10x Ammonium Buffer | | | |
|-------------------------------------|---------|---------|---------|
| • 15 mM MgCl ₂ | A301103 | A301110 | A301156 |
| • Mg ²⁺ free | A301203 | A301210 | A301256 |
| • Tween free | A301403 | A301410 | A301456 |
| • Mg ²⁺ free, Tween free | A301503 | A301510 | A301556 |
| 10x Standard Buffer | | | |
| • 15 mM MgCl ₂ | A302103 | A302110 | A302156 |
| • Mg ²⁺ free | A302203 | A302210 | A302256 |
| • Tween free | A302403 | A302410 | A302456 |
| • Mg ²⁺ free, Tween free | A302503 | A302510 | A302556 |

| 10x Combination Buffer | | | | |
|-------------------------------------|------------|-------------|----------|---------|
| • 15 mM MgCl ₂ | | A303103 | A303110 | A303156 |
| • Mg ²⁺ free | | A303203 | A303210 | A303256 |
| • Tween free | | A303403 | A303410 | A303456 |
| • Mg ²⁺ free, Tween free | | A303503 | A303510 | A303556 |
| 5x PCR Buffer RED | | | | |
| | | A301803 | - | - |
| 4x GC Buffer I | | | | |
| | | A301703 | A301710 | A301756 |
| 4x GC Buffer II | | | | |
| | | A302703 | A302710 | A302756 |
| MgCl₂, 25 mM | | | | |
| | | A308103 | A308110 | A308156 |
| Volume | | | | |
| Buffers and MgCl ₂ | 3 x 1.5 ml | 10 x 1.5 ml | 6 x 5 ml | |

Buffer Kits

| Ammonium Buffer, Standard Buffer and Combination Buffer and extra MgCl₂ (25 mM) | | | |
|---|--|------------|---------|
| • 15 mM MgCl ₂ * | | 5 x 1.5 ml | A306101 |
| • Mg ²⁺ free | | 4 x 1.5 ml | A306201 |
| • Tween free | | 4 x 1.5 ml | A306401 |
| • Mg ²⁺ free, Tween free | | 4 x 1.5 ml | A306501 |

* 5x PCR Buffer RED is also included.

Water

| H₂O | | | | |
|--|----------|------------|------------|-------------|
| <u>PCR Grade Water</u> | A360056 | - | A360042 | A360044 |
| <u>Nuclease-Free Water for molecular biology</u> | - | A340037 | A340042 | A340044 |
| Volume | | | | |
| H ₂ O | 6 x 5 ml | 1 x 100 ml | 1 x 500 ml | 1 x 1000 ml |

PCR Accessories

| Enhancers | | | |
|--|--|------------|---------|
| Betaine Enhancer Solution 5 M | | 5 x 1 ml | A351104 |
| Additives | | | |
| ROX Internal Reference Dye, 200 µM | | 3 x 0.2 ml | A351513 |
| Loading Buffers - for agarose and SDS gels | | | |
| Loading Buffer Red | | 5 x 1 ml | A608104 |
| Loading Buffer Blue | | 5 x 1 ml | A608204 |
| Loading Buffer Orange | | 5 x 1 ml | A608304 |
| Loading Buffer Cyan | | 5 x 1 ml | A608404 |
| DNA Ladders - suitable for DNA quantitation | | | |
| Iqon Mini DNA Ladder, 100 – 500 bp, 100 lanes | | 1 x 0.5 ml | A610441 |
| Iqon Low DNA Ladder, 100 – 1000 bp, 100 lanes | | 1 x 0.5 ml | A610541 |
| Iqon PCR Ladder, 100 – 3000 bp, 100 lanes | | 1 x 0.5 ml | A610641 |
| High Range DNA Ladder, 200-12000 bp, 250 lanes | | 1 x 0.5 ml | A610141 |
| Low Range DNA Ladder, 100-1000 bp, 250 lanes | | 1 x 0.5 ml | A610241 |
| PCR DNA Ladder, 100-3000 bp, 250 lanes | | 1 x 0.5 ml | A610341 |

DNA/RNA extraction

| Q-Extract DNA Extraction Solution* | | |
|---|------------|------------|
| Reactions (100 µl) | 100 | 500 |
| Fast and easy DNA extraction. | A560001 | A560004 |
| Volume | | |
| Q-Extract Extraction Solution | 1 x 10 ml | 5 x 10 ml |

*Q-Extract DNA Extraction is also available as a kit including either Taq DNA Polymerase 2x Master Mix RED or TEMPase Hot Start DNA Polymerase 2x Master Mix A BLUE. See Genotyping page 5.

| G2 DNA/RNA Enhancer For increased DNA and RNA extraction yield. Well suited for difficult matrices e.g. clay and wine | | | | |
|--|----------------|----------------|----------------|-----------------|
| Reactions | 10 | 25 | 50 | 100 |
| G2 Enhancer Solution | | | | |
| • G2 DNA/RNA Enhancer Solution - Liquid | A420015 | - | A420025 | A420035 |
| G2 Enhancer Beads | | | | |
| • G2 DNA/RNA Enhancer beads 0.1 mm | A420110 | A420125 | A420150 | A420100 |
| • G2 DNA/RNA Enhancer beads 1.4 mm | A421410 | A421425 | A421450 | A421400 |
| Volume/format | | | | |
| G2 DNA/RNA Enhancer Solution - Liquid | 1 x 5 ml | - | 5 x 5 ml | 10 x 5 ml |
| G2 DNA/RNA Enhancer beads | 10 x 2 ml vial | 25 x 2 ml vial | 50 x 2 ml vial | 100 x 2 ml vial |

PCR Clean-Up

| PureIT ExoZAP PCR CleanUp | | | | |
|----------------------------------|------------|------------|--------------|-------------|
| Reactions (2 µl) | 100 | 500 | 2 500 | 5000 |
| One-step PCR clean-up | A620601 | A620603 | A620606 | A620607 |
| Volume | | | | |
| PureIT ExoZAP | 1 x 0.2 ml | 1 x 1 ml | 5 x 1 ml | 10 x 1 ml |