Titan HotTaq EvaGreen® qPCR Mix (ROX)

Cat. No.	Pack Size
BTS0014	100 µl (25 reactions) SAMPLE
BT11101	1 ml (250 reactions)

Storage & Shipping:

Store at -20°C, shipping at room temperature.
Shipping and temporary storage for up to 1 month at room temperature has no detrimental effects on the quality of Titan HotTaq EvaGreen® qPCR Mix (ROX).

Application:

- Detection and quantification of DNA and cDNA targets
- Profiling gene expression
- High Resolution Melt (HRM) Analysis
- Microbial detection
- Viral load determination

Reagent Composition:

- **Titan HotTaq DNA polymerase**
- **5 x qPCR buffer E**
- **12.5 mM $MgCl_2$**
  1 x PCR solution – 2.5 mM $MgCl_2$
- **dNTPs**, including dTTP to improve reaction sensitivity and efficiency compared to dUTP
- **EvaGreen® dye**
- **ROX dye**

Description:

Titan HotTaq EvaGreen® qPCR Mix (ROX) is optimized for real-time quantitative PCR assays. The ready-to-load mix includes Titan HotTaq DNA polymerase, ultrapure dNTPs, $MgCl_2$, EvaGreen® dye and ROX dye according to system requirements. Only water, template and primers need to be added.
Titan HotTaq DNA polymerase is activated by a 15 min incubation step at 95°C. This prevents extension of non-specifically annealed primers and primer-dimers formed at low temperatures during qPCR setup.

EvaGreen® Dye:

EvaGreen® is a DNA-binding dye for qPCR that, compared to SYBR® Green I, has similar spectra but much less PCR inhibition. It is extremely stable and has been shown to be nonmutagenic and noncytotoxic.

EvaGreen® is compatible with all common real-time PCR cyclers – simply select the standard settings for SYBR® Green or FAM!

ROX Dye:

ROX is an internal passive reference dye used to normalize the fluorescent reporter signal generated in qPCR.

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Recommended qPCR reaction mix:

Component	Volume	Final conc.
5 x Titan HotTaq EvaGreen® qPCR Mix	4 µl	1x
Primer Forward (10 pmol/µl)	0.16-0.5 µl	80-250 nM
Primer Reverse (10 pmol/µl)	0.16-0.5 µl	80-250 nM
DNA template	1-5 µl	1-50 ng/µl
H_2O PCR grade	up to 20 µl	
Total	**20 µl**	

Recommended qPCR cycles:

Cycle step	Temp.	Time	Cycles
Initial denaturation	**95ºC**	**15 min**	1
Denaturation	95ºC	15 s	40
Annealing	60º-65°C	20 s	
Elongation	72ºC	20 s	

IMPORTANT: To activate the polymerase, include an incubation step **at 95ºC for 15 minutes** at the beginning of the qPCR cycle.

Safety warnings and precautions:

This product is designed for research purposes and *in vitro* use only. According to common laboratory safety practice, it is recommended to wear protective clothing, gloves and safety glasses. Please refer to www.bioatlas.com for Material Safety Data Sheet of the product.
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The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product in research conducted by the buyer, where such research does not include testing, analysis or screening services for any third party in return for compensation on a per test basis. The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes.

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