



APIS Precision Expression Assays

APIS Precision Expression Assays are a versatile solution for the accurate and precise quantitative expression analysis of a wide range of important human biomarkers. The assays aim to help researchers to better understand critical cellular processes and ultimately develop more effective treatments or diagnostic methods.

The APIS Precision Expression Assays feature target specific primers and probes that have been optimised for performance. Each assay has undergone testing as part of APIS' comprehensive assay development pipeline, which includes *in silico* and wet laboratory testing. This extensive testing ensures consistent assay performance across various sample types, instruments, and reagents. As a result, researchers can have confidence in the accuracy, sensitivity, specificity, and reliability of the assays.

Flexible and Optimised Assays for Your Biomarkers of Interest

- APIS Precision Expression Assays are supplied with gene-specific forward and reverse primers, as well as a fluorescently labelled probe. Probes are supplied as standard labelled with FAM on the 5' end and a quencher on the 3' end. Custom probe configuration is also available upon request.
- Standard kit size is 100 reactions which is customisable upon request
- Assays are optimised for use in one-step RT-qPCR reactions
- Assays are made to order and undergo stringent QC testing before release and shipment

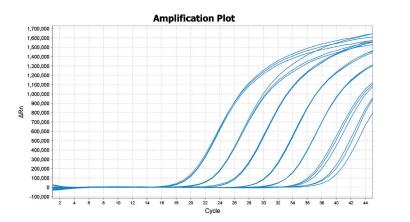
Benefits of Using APIS Precision Expression Assays

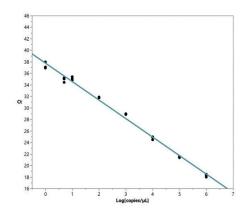
- High specificity assays have undergone extensive in silico analysis and wet-lab testing
- ➡ High efficiency assays have >90% PCR efficiency guaranteed
- Easy to use Our assays are designed to be user-friendly, with a simple protocol that involves adding cDNA or RNA to the reaction. There is no requirement for melt curve analysis post-run, saving you time and effort.
- Reagent flexibility Our assays have been tested with a variety of commercially available PCR master mixes, providing you with greater flexibility in your experimental design

APIS Precision Expression Assay Specifications

Format	Tube, Primer-Probe		
PCR method	RT-qPCR (either one or two step)		
Instrument	Any qPCR instrument with compatible cycling and emission detection capabilities		
Probe modifications	5' FAM; 3' BHQ1		
No. of reactions	100 or customisable		
Concentration	20X		
Shipping Conditions	Room Temperature		
Recommended One-Step RT-qPCR Master Mixes	 Thermo Fisher Scientific™ SuperScript™ III Platinum™ One-Step qRT-PCR Kit Integrated DNA Technologies™ PrimeTime™ One-Step RT-qPCR Master Mix New England Biolabs® Luna® Universal One-Step RT-qPCR Kit 		

Figure showing APIS Precision Expression Assays qPCR efficiency and linearity assessed using synthetic RNA. APIS Precision Expression Assays have a guaranteed PCR efficiency of >90%.





Demonstrated assay performance and linearity down to a low copy number. HULLK Precision Expression Assay: Efficiency: 104%; R^2 : >0.99. A 10-fold dilution series of synthetic RNA over 7 orders of magnitude (1x10 6 to 1 copies) was used to evaluate PCR efficiency and R^2 value. Reactions were one-step RT-qPCR using an in-house Master Mix and were run on the QuantStudioTM 5 Real-Time PCR System with the following cycling conditions: 10 min 50°C; 30 sec 95°C, 45x (10 sec 94°C, 30 sec 60°C).

List of currently available assays. Additional assays for commercial release soon.

Assay Name	Assay Type	Gene Synonyms	Kit Size (reactions)	Product Code
GAS5	Non-coding RNA Assay	NCRNA00030, SNHG2	100	01301
TAp63-regulated IncRNA 1	Non-coding RNA Assay	TROLL-1, ENSG00000236947	100	01401
TAp63-regulated IncRNA 3	Non-coding RNA Assay	TROLL-3, ENSG00000231889	100	01501
TAp63-regulated IncRNA 7	Non-coding RNA Assay	TROLL-7, ENSG00000251562	100	01601
TAp63-regulated IncRNA 4	Non-coding RNA Assay	TROLL-4, ENSG00000272168	100	01701
TAp63-regulated IncRNA 6	Non-coding RNA Assay	TROLL-6, ENSG00000266651	100	01801
TAp63-regulated IncRNA 8	Non-coding RNA Assay	TROLL-8, ENSG00000258471	100	01901
TAp63-regulated IncRNA 9	Non-coding RNA Assay	TROLL-9, ENSG00000237976	100	02001
ROR1	Gene Expression Assay	NTRKR1	100	00601
ROR2	Gene Expression Assay	NTRKR2, BDB, BDB1	100	00701
TROP2	Gene Expression Assay	GA733-1, EGP-1	100	00801
PD-L1	Gene Expression Assay	B7-H, B7H1, PDL1, B7-H1, PDCD1LG1	100	00901
ERBB1	Gene Expression Assay	ERRP, EGFR, HER1	100	01001
ERBB2	Gene Expression Assay	NGL, NEU, HER-2, CD340, HER2, c-ERB2, c-ERB-2, MLN-19, p185(erbB2)	100	01101
ERBB3	Gene Expression Assay	HER3, LCCS2	100	01201

For Research Use Only. Not for use in diagnostic procedures. For more information on these products please contact info@apisassay.com