GeneGlobe — the world's largest database of matching siRNA and RT-PCR assays

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Gene-specific products for all human, mouse, and rat genes for RNAi, gene expression, and protein detection

GeneGlobe is an easy-to-use, comprehensive Web portal that allows you to find information about, search for, and order high-quality products for human, mouse, and rat genes.

- **HP GenomeWide siRNA**
  HP GenomeWide siRNAs are highly potent, specific siRNAs designed using the innovative HiPerformance siRNA Design Algorithm to target human, mouse, and rat genes.
- **HP Validated siRNA**
  HP Validated siRNAs are tested for functionality by quantitative RT-PCR using QuantiTect® Primer Assays and proven to provide high knockdown. They are available to target a wide range of human genes. Experimental details including knockdown efficiency, siRNA concentration, cell line, and transfection reagent are provided.
- **Published Library siRNA**
  Published Library siRNAs are duplexes with sequences that have been published in peer-reviewed scientific journals.
- **QuantiTect Primer Assays**
  QuantiTect Primer Assays are validated primer pairs that provide highly specific and sensitive results in quantitative, real-time RT-PCR with SYBR® Green detection.
- **QuantiTect Gene Expression Assays**
  QuantiTect Gene Expression Assays are an expanding range of functionally validated primer–probe sets for use in quantitative, real-time RT-PCR.
- **LiquiChip® assay kits**
  The LiquiChip system is a complete platform for multiplex bead-based protein assays that offers the potential to rapidly and simultaneously detect multiple analytes in a single small-volume sample.

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Integrated products provide successful results for the whole RNAi experiment

- Highly potent siRNA for every human, mouse, and rat gene provides high knockdown levels (Figure 1).
- Matching integrated QuantiTect Primer Assays for quantitative, real-time RT-PCR analysis using SYBR Green detection are ideal for downstream analysis of knockdown (Figure 2).

HP Validated siRNAs Provide Proven Knockdown

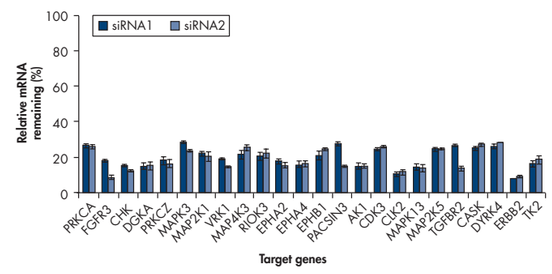

Figure 1 HP Validated siRNAs were transfected into MCF-7 cells. After 48 hours, target gene knockdown was assessed by quantitative, real-time RT-PCR using QuantiTect Primer Assays for SYBR Green based detection. mRNA levels were normalized and calculated relative to levels in untransfected cells (set at 100%).

Reliable, Sensitive Quantitative RT-PCR after PRKCA Knockdown

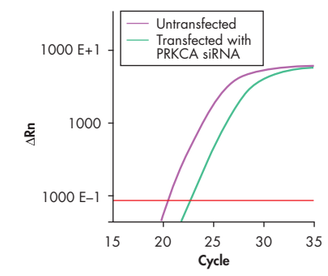

Figure 2 Amplification curves showing quantification of PRKCA in untransfected MCF-7 cells and cells that have been separately transfected with each of 2 HP Validated siRNAs targeting PRKCA. Quantitative, real-time RT-PCR was carried out using the QuantiTect Primer Assay for PRKCA and the QuantiTect SYBR Green RT-PCR Kit.

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Easily find products specific for the gene of interest at GeneGlobe

- Simply enter the gene name, symbol, or accession number, select the species and desired products, and click search to easily find ready-to-use, optimized products for gene expression, RNAi, and protein detection.
- siRNA controls and QuantiTect Endogenous Control Assays are also available enabling design of a perfectly controlled RNAi or gene expression experiment.

Easily Search for Gene-Specific Products

Figure 3 The search page at GeneGlobe.

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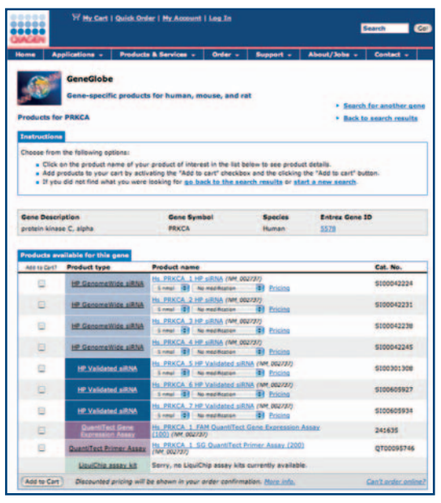
Products for PRKCA cover the entire RNAi workflow

The list of products for PRKCA demonstrates how the range at GeneGlobe provides solutions for all stages of an RNAi experiment.

Solutions for the Complete Experiment



Gene-specific solutions for PRKCA are as follows:

- 4 HP GenomeWide siRNAs (predesigned siRNA) at 5 nmol or 20 nmol.
- 3 HP Validated siRNAs (functionally tested siRNA) at 5 nmol or 20 nmol
- A wide range of modification options, including Alexa Fluor® labels to monitor transfection efficiency. Fluorescent labels also include Cy®3, Cy5, and rhodamine.
- QuantiTect Primer Assay (for real-time RT-PCR with SYBR Green detection)
- QuantiTect Gene Expression Assay (for probe-based real-time RT-PCR)
- Supplementary products including HiPerFect Transfection Reagent and positive and negative siRNA controls.

Figure 4 PRKCA-specific products cover all stages of an RNAi experiment.

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Graphical representation of siRNA and QuantiTect Primer Assays

- At GeneGlobe, a graphical representation shows the location of siRNAs and QuantiTect Primer Assays on the transcript sequence. The base position is shown on the ruler.
- HP Validated siRNAs, HP GenomeWide siRNAs, and QuantiTect Primer Assays are shown on the graphic.

Graph Showing Location of PRKCA-Specific Products

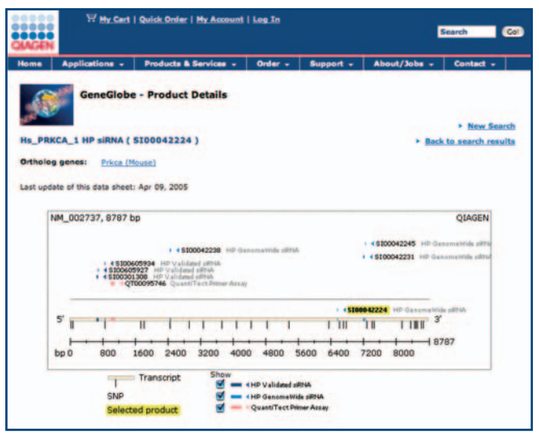

Figure 5 The locations of gene-specific products for PRKCA are marked on the transcript map at GeneGlobe.

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Summary

GeneGlobe is an easy-to-navigate, searchable Web portal that provides:

- Easily accessible, ready-to-go solutions for RNAi, gene expression analysis, and protein detection.
- Matching, standardized siRNA and quantitative RT-PCR assays that guarantee success of the entire RNAi workflow.
- Time and effort savings as there is no need to design and test multiple siRNAs and primers.

The World's Largest Database of Matching siRNA and RT-PCR Assays

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Manufactured for QIAGEN by Nanogen

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