

Product datasheet

HsPGK1 ChIP primer Exon 1 (Forward) ab83594

Overview

Product name	HsPGK1 ChIP primer Exon 1 (Forward)
General notes	Accession number: NM_000291. The HsPGK1 primers and probe can be used to quantify a control locus in chromatin immunoprecipitation (ChIP) assays with chromatin prepared from human cells. PGK1 (3-phosphoglycerate kinase 1) is a highly expressed housekeeping gene located on the X chromosome. The primers and probe are located in exon 1, within 1 kb of the transcription start site. In most female cells the locus is enriched with both active (e.g. Histone H3 K18 acetylation, see image with ab1191), and heterochromatic (e.g. Histone H3 K9 tri methylation, see image with ab8898) histone modification marks, as one copy of the gene undergoes X chromosome inactivation. In male cells, this locus is highly enriched with histone modifications associated with active gene transcription whereas it only shows low levels of heterochromatic histone modifications.
Tested applications	Suitable for: Real Time PCR

Properties

Form	Liquid
Storage instructions	Store at +4°C short term (1-2 weeks). Aliquot and store at -20°C long term. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: None Constituents: ddH2O
Function	In addition to its role as a glycolytic enzyme, it seems that PGK-1 acts as a polymerase alpha cofactor protein (primer recognition protein).
Pathway	Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 2/5.
Involvement in disease	Defects in PGK1 are the cause of phosphoglycerate kinase 1 deficiency (PGK1D) [MIM:300653]. It is a condition with a highly variable clinical phenotype that includes hemolytic anemia, rhabdomyolysis, myopathy and neurologic involvement. Patients can express one or more of these manifestations.
Sequence similarities	Belongs to the phosphoglycerate kinase family.
Cellular localization	Cytoplasm.

Applications

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The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Real Time PCR		Use at an assay dependent concentration. Suitable for the analysis of chromatin immunoprecipitated DNA using Taqman [®] real time PCR. Quantity provided for 200 reactions. Please see the protocol page for the instructions for this product.

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