BioGenex
Accelerating the pace of precision medicine
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DATA SHEET
mRNA-ARG1 probe

Catalog No.	Description
PR274-100	One vial of 0.650 ml of probe in hybridizationbuffer

Analyte Specific Reagent. Analytical and performance characteristics are not established.

Doc. No. 932-PR274-100
Rev. C
Date of release: 24-Jul-2024

Description
The official name of this gene is "arginase 1." The *ARG1* gene provides instructions for producing the enzyme arginase. This enzyme participates in the urea cycle, a series of reactions that occurs in liver cells.

Specifications
Messenger RNA (mRNA) is a subtype of RNA. An mRNA molecule carries a portion of the DNA code to other parts of the cell for processing. mRNA is created during transcription. During the transcription process, a single strand of DNA is decoded by RNA polymerase, and mRNA is synthesized. Physically, mRNA is a strand of nucleotides known as ribonucleic acid, and is single-stranded.

Storage and Handling
Store the reagent at 2-8 °C. Do not freeze. Do not use the reagent after expiration date on vial. The reagent must be brought to room temperature before use. (Important! The presence of precipitates induces background staining).

Precautions:
For professional use. The probe contains formamide. Formamide is classified as a teratogen. Pregnant workers should keep exposure to a minimum. Avoid inhalation, ingestion, and contact with unprotected skin. If skin contact occurs, wash thoroughly with soap and water. For more information, refer to the Material Safety Data Sheet, which is available upon request.

Quality Control
Each lot of this mRNA probe is tested by *In Situ* hybridization for Quality Control purposes. Refer to the BioGenex Quality Control Testing Conditions table for additional information.

References

1. Silva JM, Dominguez G, Silva J, et al: Detection of epithelial messenger RNA in the plasma of breast cancer patients is associated with poor prognosis tumor characteristics. Clin Cancer Res 7:2821-2825, 2001

2. Pawlak A, Wu SJ, Bulle F, Suzuki A, Chikhi N, Ferry N. Different gamma-glutamyl transpeptidase mRNAs are expressed in human liver and kidney. Biochem Biophys Res Commun 1989*;* 164*:* 912–918.

3. Jacobsen LC,Theilgaard-Monch K,Christensen EI,Borregaard N. Arginase 1 is expressed in myelocytes/metamyelocytes and localized in gelatinase granules of human neutrophils. Blood 2007*;* 109*:* 3084–7.

BioGenex Quality Control Testing Conditions

Parameter	Conditions used
Control Tissue	Colon Carcinoma (PR-274)
Tissue Type	Formalin-fixed, paraffin-embedded cancer tissues