Promega

Product Application

Automated purification of total RNA from canine serum

Purify total RNA, including miRNA from canine serum using the Maxwell® RSC Instrument and Maxwell® miRNA Plasma and Serum Kit.

Kit: Maxwell® miRNA Plasma and Serum Kit (Cat.# AS1680)

Analyses: RT-qPCR using TaqMan® miRNA assays

Sample Type: Canine serum

Input: 200µl – 500µl

Materials Required:

- Maxwell® RSC instrument (Cat.# AS4500)
- Maxwell® miRNA Plasma and Serum Kit (Cat.# AS1680)
- Heat Block
- Vortex

This protocol was developed by Promega Applications Scientists and is intended for research use only.

Users are responsible for determining suitability of the protocol for their application.

For further information, see Technical Manual TM546, available at: **www.promega.com/protocols**

or contact Technical Services at: **techserv@promega.com**

Protocol:

Extract canine serum samples following TM546 for the Maxwell® RSC miRNA Plasma and Serum Kit.

Results:
Canine serum samples were extracted using the Maxwell® RSC miRNA Plasma and Serum Kit (Cat.# AS1680) according to TM546, with sample input volumes varying from 200µl to 500µl. Eluates were amplified with TaqMan® miRNA 2-step RT-qPCR Assays for miRNAs 26b (Assay ID 000406) and 29a (Assay ID 002112) (Applied Biosystems).

The Maxwell® RSC miRNA Plasma and Serum Kit (Cat.# AS1680) is compatible with canine serum samples.

Increased volume of canine serum resulted in increased miRNA yield (lower Cq values).

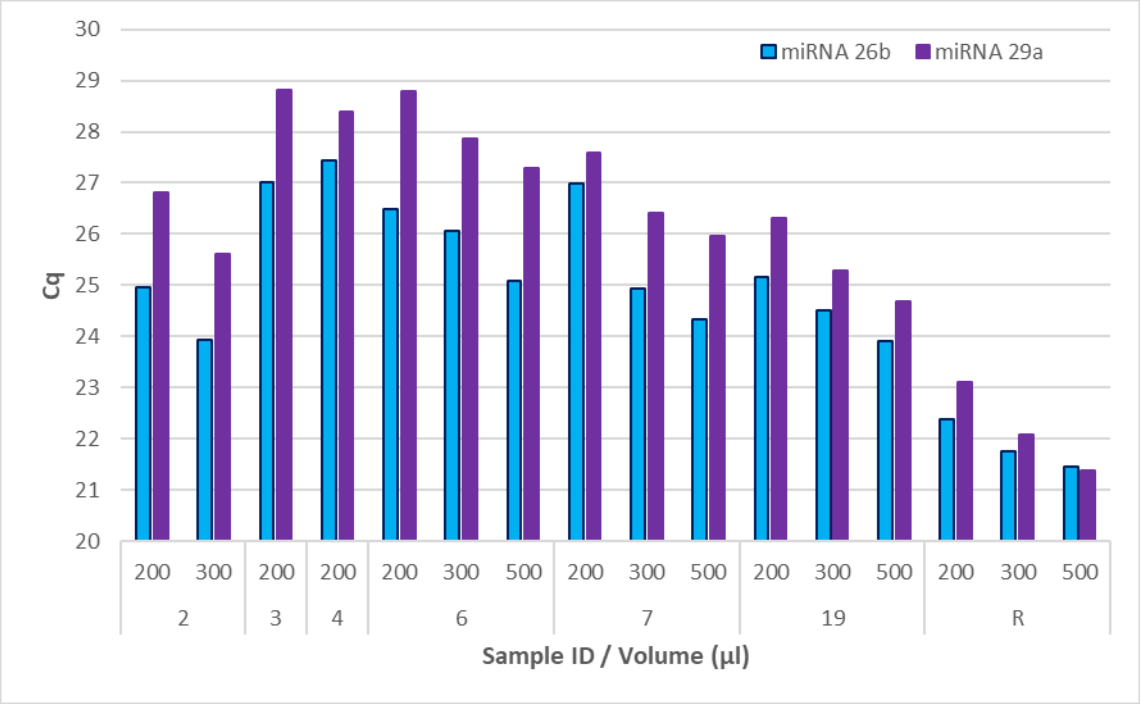

Figure 1. TaqMan® miRNA 2-step RT-qPCR Results for miRNA 26b and 29a. Increased sample volume results in increased miRNA (earlier Cqs) in all samples with multiple volumes tested, for both miRNA targets. Results are averages (n=2) qPCR replicates of a single reverse transcriptase reaction.