

# MagDx<sup>™</sup> Beads

# **AQM** Magnetic Beads

#### Description

Magnetic beads are commonly used in nucleic acid extraction methods. MagDx<sup>™</sup> beads are designed to adsorb nucleic acids with high efficiency. This allows them to be used for nucleic acid extractions in a diagnostic setting. AQM manufactures nucleic acid extraction kits, which includes reagents and beads for both manual and automated nucleic extraction methods.



#### **Product Advantages**

- Greater sensitivity when compared with currently commercially available beads.
- Compatible with both manual and automated extraction methods.
- Encapsulated to prevent ion leakage.
- Small particle size decreases settling rate when compared to competitors.
- Extraction procedure only requires pipettes and a magnetic plate.
- Kit can be used in conjunction with existing lab protocols for nucleic acid extraction.

## **Product Specifications**

Related Categories		
Forms	Spherical or pseudospherical	
Particle Size	≤0.5 μm	
Colour	Brown/black	
Typical Concentrations	3 w/w % solution in Nuclease Free Water	
Storage conditions	4 °C up to a year	





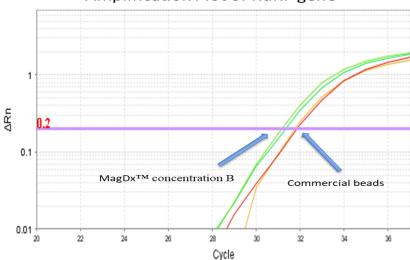
### **Characterization Data**



Figure 1: MagDx<sup>™</sup> beads in response to an external magnetic field

Bead type	COVID-19 E gene	COVID-19 RdRP gene	MS2 Control
Commercial beads	30.07	30.42	23.87
MagDx™	29.53	29.82	23.36

**Table 1:** Comparison of RT-PCR detection threshold (Ct) values for manual COVID-19 RNA extractions using both commercially available and  $MagDx^{M}$  beads. Lower Ct values are indicative of higher efficiency of RNA extraction and greater test sensitivity.  $MagDx^{M}$  beads outperform commercially available beads. Testing was conducted by Alberta Precision Laboratories.



#### Amplification Plot of RdRP gene

**Figure 2**: RT-PCR amplification curve for the COVID-19 RdRP gene comparing the threshold of detection (Ct) values for the MagDx<sup>TM</sup> beads (Table 1) and commercially available beads. The MagDx<sup>TM</sup> beads take fewer cycles to reach the threshold of detection when compared with commercial beads.

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