"MagQu" Phospho-α-synuclein Control Solution



CL-PS1-000TR Concentration L
CL-PS1-001TR Concentration H





For Research Use Only

Intended Use

"MagQu" Phospho-α-synuclein Control Solution is used as a standard control for "MagQu" Phospho-α-synuclein IMR Reagent (MF-PS1-0060).

Special instrumentation requirement

Magnetic Immunoassay Analyzer (XacPro-S)

Product Description

Parkinson's disease (PD) is characterized by the intraneuronal $\alpha\text{-synuclein}$ inclusions called Lewy bodies. Increase of phosphorylation of $\alpha\text{-synuclein}$ in Serine 129 (S129) has been correlated with the aggregation, toxicity, protein interaction and turnover of $\alpha\text{-synuclein}.$ Thus, phosphorylation of $\alpha\text{-synuclein}$ S129 can indicate the pathogenesis of PD. 1,2

Principles of Test

"MagQu" Phospho-α-synuclein Control Solution is used as a standard control for " MagQu" Phospho-α-synuclein IMR Reagent (MF-PS1-0060). The antibody conjugated on the surface of Fe_3O_4 magnetic particles (~ 50 nm) could bind with phosphorylation of α-synuclein S129 and form clusters. With the increase of cluster, the signal of ac susceptibility (χ_{ac}) will decrease in the applied ac magnetic field. That is the principle of Immuno Magnetic Reduction (IMR). By measuring the reduction of χ_{ac} , we can quantify phosphorylation of α-synuclein S129 in the sample easily and accurately.

Storage & Stability

Storage the product at -15 to -30°C (5.0 to -22.0°F).

Please refer to the detail expiration date on the product label.

CAUTION: Do not use the product beyond the expiration date.

CAUTION: Avoid repeated freezing and thawing cycles.

Statement of Warnings



BIOHAZARD

All products or objects that come in contact with human or animal body fluids should be handled carefully, before and

after cleaning, as if capable of transmitting infectious diseases. Wear facial protection, gloves, and protective clothing. Safety Data Sheet is available at www.magqu.com.

- 1. For research use only.
- 2. Do not use the product if there is any precipitation.
- 3. Aliquot the product for first use. Avoid repeated freezing and thawing cycles.
- 4. Do not use the product beyond the expiration date.
- 5. Keep out of reach of children.

- 6. The disposal of the waste generated should follow the local rules.
- If there is any problem about the product, please contact the MagQu Co. Ltd.

Use Direction

- For use with the "MagQu" Phospho-α-synuclein IMR Reagent (MF-PS1-0060) at room temperature (15 to 30°C).
- Use the product for each measurement.

Procedure

Materials required but not supplied

- Magnetic Immunoassay Analyzer (XacPro-S)
- "MagQu" Phospho-α-synuclein IMR Reagent (MF-PS1-0060)
- Sample testing tubes
- Transfer pipettes

Thaw out the product on ice and then take it to room temperature (15 to 30°C) before use. Mix the product thoroughly before use and then restore it to -15 to -30°C as soon as possible.

- 1. Aliquot the product when first use. Avoid repeated freezing and thawing cycles.
- 2. Add 60 μL of "MagQu" Phospho- α -synuclein Control Solution into sample testing tube.
- 3. Add 60 μ L of "MagQu" Phospho- α -synuclein IMR Reagent (MF-PS1-0060) into the same sample testing tube. Vortex for about 15 seconds to mix thoroughly.
- Insert the sample testing tube into the measuring slot of Magnetic Immunoassay Analyzer (XacPro-S).
- Process the measurement according to the operation & maintenance manual of Magnetic Immunoassay Analyzer (XacPro-S).
- 6. The final concentration value is acceptable while it falls between \pm 20 % of the concentration value.

References

- Wang, Y., Shi, M., Chung, K. A., Zabetian, C. P., Leverenz, J. B., Berg, D., Srulijes, K., Trojanowski, J. Q., Lee, V. M., Siderowf, A. D., Hurtig, H., Litvan, I., Schiess, M. C., Peskind, E. R., Masuda, M., Hasegawa, M., Lin, X., Pan, C., Galasko, D., Goldstein, D. S., Jensen, P. H., Yang, H., Cain, K. C., Zhang, J. (2012). Phosphorylated α-synuclein in Parkinson's disease. Science translational medicine, 4(121), 121ra20.
- Oueslati A. (2016). Implication of Alpha-Synuclein Phosphorylation at S129 in Synucleinopathies: What Have We Learned in the Last Decade?. Journal of Parkinson's disease, 6(1), 39-51.

Glossary/symbol definition:

SYMBOL	DESCRIPTION
<u> </u>	Caution, refer to accompanying documents
LOT	Batch code
REF	Catalogue number,
CONT	Content
2002-03	Use by Expressed as: CCYY-MM-DD
检	Biological risk
i	Consult instructions for use.
-15℃	Temperature limitation
RUO	For research use only
	Manufacturer
2022-03-24	Country and date of manufacture
	Do not use if package damaged



MagQu Co., Ltd.

Rm3, 6F, No.95, Minquan Rd., Xindian Dist, New Taipei City

231625, Taiwan

Tel: +886-2-8667-1897 Fax: +886-2-8667-1809 E-mail: <u>info@magqu.com</u> Website : <u>www.magqu.com</u>

Rev. Apr-25-2022