

Feb 28, 2024

ELISA (enzyme-linked immunosorbent assay) for α -Syn quantification

DOI

<https://dx.doi.org/10.17504/protocols.io.261gedywyv47/v1>

Jean-Louis Parmasad¹

¹University of Ottawa



Jean-Louis Parmasad

University of Ottawa

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN  ACCESS



DOI: <https://dx.doi.org/10.17504/protocols.io.261gedywyv47/v1>

Protocol Citation: Jean-Louis Parmasad 2024. ELISA (enzyme-linked immunosorbent assay) for α -Syn quantification. protocols.io <https://dx.doi.org/10.17504/protocols.io.261gedywyv47/v1>

License: This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

We use this protocol and it's working

Created: February 28, 2024



Last Modified: February 28, 2024

Protocol Integer ID: 95878

Keywords: synucleinopathy, synuclein, syn quantification elisa, syn quantification, linked immunosorbent assay, immunosorbent assay, related proteins in the context, related protein

Disclaimer

DISCLAIMER – FOR INFORMATIONAL PURPOSES ONLY; USE AT YOUR OWN RISK

The protocol content here is for informational purposes only and does not constitute legal, medical, clinical, or safety advice, or otherwise; content added to [protocols.io](https://www.protocols.io) is not peer reviewed and may not have undergone a formal approval of any kind. Information presented in this protocol should not substitute for independent professional judgment, advice, diagnosis, or treatment. Any action you take or refrain from taking using or relying upon the information presented here is strictly at your own risk. You agree that neither the Company nor any of the authors, contributors, administrators, or anyone else associated with [protocols.io](https://www.protocols.io), can be held responsible for your use of the information contained in or linked to this protocol or any of our Sites/Apps and Services.

Follow institutional guidelines for ethical and safe use of biological materials.

Abstract

ELISA (enzyme-linked immunosorbent assay) for α -Syn quantification. Useful for analyses of alpha-Synuclein and related proteins in the context of synucleinopathy.



- 1 Coat 384-well MaxiSorp plates (Nunc, Inc) with capturing antibody (α -Syn, BD Biosciences, 610787) diluted 1:500 in coating buffer (NaHCO₃ with 0.2% NaN₃, pH9.6) overnight at 4 °C.
- 2 Wash 3 times with PBS.0.05% Tween-20 (PBS-T).
- 3 Block for 1hr at 37 °C in blocking buffer (1.125% fish skin gelatin; PBS-T)
- 4 Load samples in duplicate into wells.
- 5 Incubate at RT for 2hr.
- 6 Add the desired antibody to the plate for 1 h at 37 °C
- 7 Wash 5 times with PBS-T.
- 8 Add ExtrAvidin phosphatase (Sigma, E2636) diluted in blocking buffer to wells. Incubate for 30 min at 37 °C.
- 9 Carry out colour development with fast-p-nitrophenyl phosphate (Sigma, N1891) at 405 nm every 2.5 min for up to 60 min.
- 10 Identify time point(s) where standards and sample dilutions are in the log phase.