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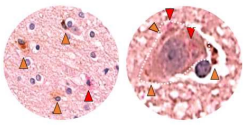
Antibody and TDP-43 RNA aptamer dual staining to detect patterns of co-pathology in FFPE-preserved human tissue, as described in Rifai et al., 2024 (Brain Pathology): A SOP and tick-sheet. V.1



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Manuscript citation:
Reference for citations of this method

Clinicopathological analysis of *NEK1* variants in amyotrophic lateral sclerosis.
Olivia M. Rifai, Fergal M. Waldron, Danah Sleibi, Judi O'Shaughnessy, Danielle J. Leighton*, Jenna M. Gregory*‡ (2024). *Brain Pathology* DOI: 10.1111/bpa.13287 (in press at the time of publication of this SOP), *equal contributions, ‡corresponding author.

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Protocol status: Working
We use this protocol and it's working

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Disclaimer

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Abstract

Here we provide a SOP to outline the correct procedures to dual stain FFPE human tissue for, 1) pathological TDP-43 protein, along with 2) any other protein of interest, with the aim of visualising protein of interest histology in the context of TDP-43 pathology.

This protocol can be implemented for dual staining of any rabbit or mouse primary detection antibody (using the Novolink Polymer Detection System), with our TDP-43 RNA aptamer (biotinylated) as published in *Acta Neuropathologica* here https://link.springer.com/article/10.1007/s00401-024-02705-1 in Spence and Waldron *et al*., 2024.

The resulting dual stain will show brown chromogen (detecting the target of the primary antibody) with red chromogen (detecting TDP-43 pathology with our TDP-43 RNA aptamer.

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Attachments

PDF IHC_SOP_Double Stain... 558KB

PDF IHC_TS_Double Stain_... 234KB

Image Attribution

Jenna M Gregory

Guidelines

See SOP pdf.

Materials

See SOP pdf Appendix A.

1

Protocol references

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