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The image depicts a pheochromocytoma, PC12, culture that is spontaneously expressing the neuronal marker beta-tubulin III. Pheochromocytoma tumors are found in the adrenal medulla, and are derived from chromaffin cells responsible for secreting catecholamines. Interestingly, the chromaffin cells are neural crest-derived, and when treated with neuronal growth factor, they assume “pseudoneuronal” characteristics, and are often used for in vitro neuronal studies.

The green stain is the Tuj-1 (beta-tubulin III) neuronal marker, the red stain is the F-actin stained with phalloidin and blue stain is DAPI.

The image is a 10 μm slice at 200x magnification.

Credit: H K Bid and D Oswald, The Research Institute at Nationwide Children’s Hospital, Columbus, OH, USA

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