Are you planning on requesting IHC/IF?

Antibody Selection

When buying new antibodies, watch out for ill-characterized ones. Look for vendors that show images and validation with other assays such as WB. Check for species the antibodies are produce on (host) and/or are expected to react with.

<u>Monoclonal vs polyclonal antibodies</u>: Polyclonal antibodies are more **sensitive**. The mixture will include antibodies that bind all over the target protein, so even if part of it is buried or otherwise inaccessible, you should still be able to get a signal. Monoclonal are more **specific**.

If the antibody has not been tested on tissues before, it will take time and effort to find what is the best concentration of the primary antibody and the condition that best work on your samples. We will also determine if the antibody is specific with the target and specie of interest. This is called **titration or antibody optimization**.

We also have a list of antibodies that have been previously tested at the lab. Ask us about our current inventory.

You should plan ahead your experiment.

When requesting IHC/IF you should be able to provide:

- Information about the target/ specie or the name /lot of the antibody you are interested on trying. Use search engines, such as those available through Biocompare (<u>https://www.biocompare.com/Antibodies/</u>), SelectScience (<u>https://www.selectscience.net/antibodies/product-directory/</u>), CiteAb (<u>https://www.citeab.com/</u>). This saves valuable time that is otherwise spent visiting each vendor's website, and allows you to extend your search to vendors you may not be familiar with.
- If possible provide with positive and negative control tissues. We use negative controls for the techniques where the primary antibody is omitted but it will be really valuable if a known negative control can be provided by you.
- Have you validated the presence of protein of interest by other assays (qPCR, WB, etc)?
- Here is a link to one of our consulted site https://www.proteinatlas.org/

And remembernot all staining brown is a positive staining!