How is predicted cross-reactivity on product pages calculated?

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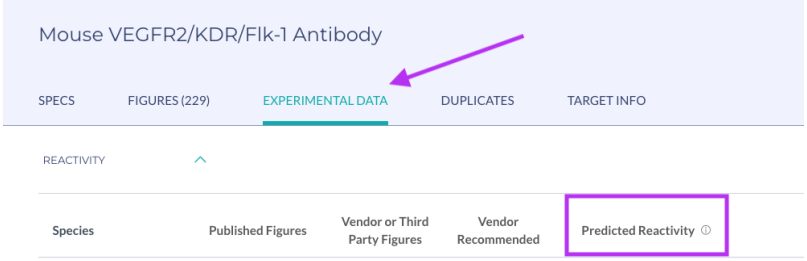
Predicted cross-reactivity analysis is extremely valuable for identifying new uses or targets for an antibody in species that were not explicitly tested for by the vendor

Although antibodies can be highly specific, similarities in *epitope* (the region of an antigen that an antibody recognizes) between homologs or otherwise similar targets can lead to cross-reactivity. Depending on your needs, this could be valuable information to:

- Identify antibodies that can be used species outside of those recommended by a vendor
- Identify antibodies that may cause issues in your experiment because they may cross-react with other species

Cross-reactivity is data is available for over **1 million antibody products**. Our bioinformatics team conducts in-house, cross-reactivity analysis for antibody products with known *immunogen sequence* by performing BLAST sequence alignment between the immunogen sequence and protein sequences from organisms across the UniProtKB/Swiss-Prot database.

Within select antibody **product pages**, look for cross-reactivity data under *Experimental Data* > *Reactivity* > *Predicted Reactivity*



Percent sequence similarities between the *immunogen sequence* and the analogous sequence in all isoforms are displayed. We show both high and low sequence similarity results for you to review. Click the **UniProtID** to view more information about that particular protein isoform for the associated species.