

## Antibody Reproducibility

As the original manufacturer of all our products, we know our antibodies. To ensure functionality and assay reproducibility in a real lab situation, all new lots tested separately for each application the antibody is validated for. In immunohistochemistry each new lot is tested in parallel to existing lots in a large number of tissues.

### Validation and Reproducibility

Validation and reproducibility are both important to guarantee high antibody quality, but are two completely different things.

#### Validation

Before an antibody is introduced in our catalog, it has been thoroughly validated to ensure specificity. All validation data is presented on the product data sheet for each antibody.

#### Reproducibility

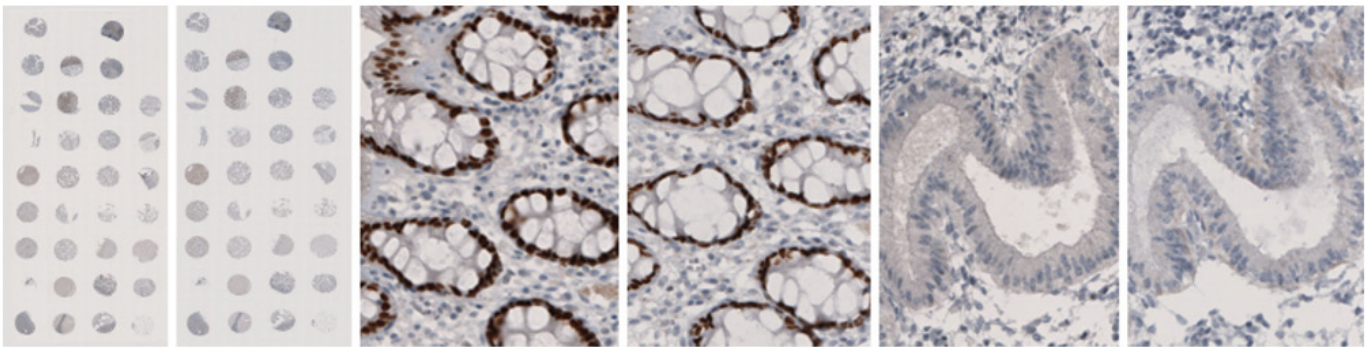
Each new lot of the antibody is then tested against its reference lot to make sure that new lots meet the same specificity criteria in each application. This is how we guarantee reproducibility.

### Verifying Reproducibility in all Applications

For each new lot of an antibody, our Quality Control team verifies lot to lot reproducibility separately for each application the antibody is validated for, such as immunohistochemistry, Western blot and immunocytochemistry.

### Reproducibility in Immunohistochemistry

During Quality Control, immunohistochemistry staining is performed on a large number of human tissues using Tissue Micro Arrays (TMA). To ensure reproducibility, we compare the tested lot to a reference lot on consecutive tissue sections. In this way we ensure that each new lot fulfills the product specification for immunohistochemistry determined during the validation process, and that the lot behaves the same as the former lot.



**Figure 1.**

The images show examples from the quality control of antibody Anti-SATB2 (HPA001042) where a new lot is tested against a reference lot. The two left images show staining of 33 different tissues in a TMA using the lots B105190 and A43312 respectively. The two middle images shows the staining of the rectum cores in higher magnification, both displaying nuclear staining in glandular cells. The two images to the right shows absence of staining in endometrium consistently in the two lots.

