What is IHC testing?
Abnormal growths are commonly found in the large intestine (called the colon) and at the end of the colon (called the rectum). Growths can also occur in other parts of the body. These growths, called tumors, may or may not be cancer. When you have a tumor removed, the tissue is examined by pathology to check:

- the size of the tumor
- if the tumor is cancer
- if cancer has spread

The pathology lab uses different tests to study these tumors. One test is called immunohistochemistry (IHC) testing.

What does the IHC test evaluate?
IHC testing looks for four proteins normally found in a tumor. Results from IHC testing help identify people who may have a hereditary form of cancer known as Lynch syndrome. These proteins are absent in some cancers. When a protein is absent in a tumor, it gives information about how the cancer started, how best to treat it, and whether it may be linked to Lynch syndrome.

The IHC test looks for the following four proteins:
- MLH1
- MSH2
- MSH6
- PMS2

What is Lynch syndrome?
Lynch syndrome is a type of inherited cancer risk that runs in families. Families with Lynch syndrome may have more cancers at younger ages than a typical family. The most common cancers that happen with Lynch syndrome are colon, rectal, endometrial (uterus), ovarian, and urinary tract. People with Lynch syndrome also have a higher chance of having more than one cancer in their lifetime. Learning who has Lynch syndrome can help that person and their family get the right medical care.

What does my IHC result mean?

- **“Normal expression” - All four proteins are present in your tumor.**
  This result means you most likely do not have Lynch syndrome. Normal expression is found about 80% of the time (8 out of every 10 tests). Your doctors will discuss treatment options with you based on the stage of your cancer at diagnosis.

- **“Abnormal expression” - One or more of the proteins is absent in your tumor.**
  This result means you might have Lynch syndrome. Abnormal expression is found about 20% of the time (2 out of every 10 tests).
  - If MLH1 or PMS2 proteins are absent
    It is less likely that you have Lynch syndrome. More testing is automatically done on the tumor to check for Lynch syndrome.
  - If MSH2 or MSH6 proteins are absent
    It is possible you have Lynch syndrome. You will be contacted by KP Genetics Department to review your results. A genetic counselor will ask about your family history, discuss genetic testing options, and answer questions about what this means for your health care.