

Chromatin Immunoprecipitation (ChIP) Sequencing

Turn Around Time: 6-8 weeks for histone marks;
8-10 weeks for other proteins

TEST DESCRIPTION

Analyze protein interactions with DNA and determine the sites on DNA where certain proteins or histone marks are bound.

SAMPLE REQUIREMENTS

Actively growing tissue culture cells or fixed cell pellet: consultation available regarding method of fixation; 2-6 million cells per protein or histone mark desired to test.

Tissue ** *available within the next 12 months:* Flash frozen tissue, 50-200mg, depending on protein or histone mark desired to test.

Shipping Conditions: -80°C, ultra frozen; overnight.

TEST METHODOLOGY

Cells are fixed in a way that crosslinks DNA sequences with proteins. The DNA is sheared to create small segments of DNA. Proteins are captured with antibodies and the DNA-protein complex is pulled down. The DNA and proteins are unlinked and resulting DNA undergoes library preparation for Illumina next generation sequencing. Matching input samples are required for all sample types submitted and act as a control level and coverage of total DNA isolated. Recommended coverage of 10-30 million reads per sample will depend on type of peaks expected from the protein pulldown.

LIMITATIONS

Specificity of antibody is necessary for clean capture of protein.

Contact & Submission

GSPMCBusinessOffice@mcw.edu | 414-955-2550



Genomic Sciences
& Precision Medicine
Center

GSPMCBusinessOffice@mcw.edu | 414-955-2550