

SNAP-ChIP verification method

SNAP-ChIP™ verification uses a novel spike-in control that allows you to determine the specificity of your antibody and normalize your chromatin immunoprecipitation (ChIP) experiment. Thermo Fisher Scientific and EpiCypher have partnered to use SNAP-ChIP spike-in panels to create best-in-class ChIP antibodies for histone PTMs.

What is SNAP-ChIP verification?

- A proprietary method developed by EpiCypher, in which a panel of barcoded recombinant nucleosomes is added into any ChIP workflow, and subsequent analysis with qPCR and/or next-generation sequencing (NGS) provides information about specificity of the antibody and efficiency of the immunoprecipitation
 - SNAP-ChIP verification uses a spike-in ChIP control for studying histone modifications
 - A verification method that can be used in both native and crosslinked ChIP experiments
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Why should I worry about antibody specificity?

- A nonspecific antibody will misguide your understanding of the biological function of a histone modification
 - The antibody specificity determined by peptide array does not correlate with specificity in immunoprecipitation assays
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What will I learn when using SNAP-ChIP verification?

- You will learn whether or not your antibody is specific
 - You will know your immunoprecipitation efficiency
 - You will have normalization information to compare across ChIP experiments
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How is SNAP-ChIP verification different from ChIP?

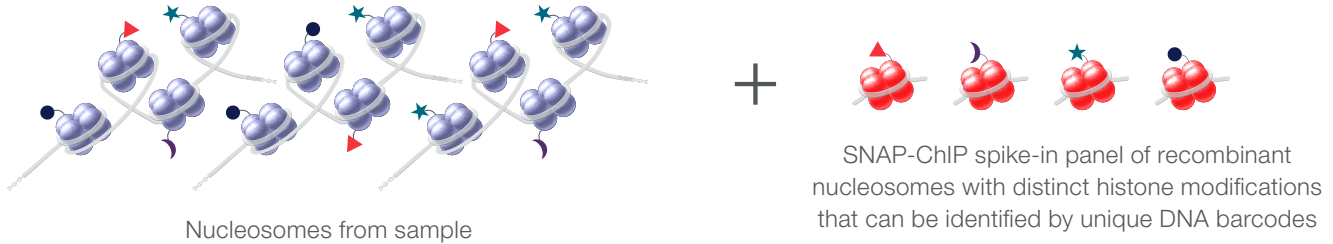
- SNAP-ChIP verification is a spike-in control for your ChIP experiment
- The SNAP-ChIP method can be used with many methyl, acyl, and oncohistone antibodies
- Invitrogen™ antibodies that have been verified by the SNAP-ChIP method are marked with this badge:

 Advanced verification

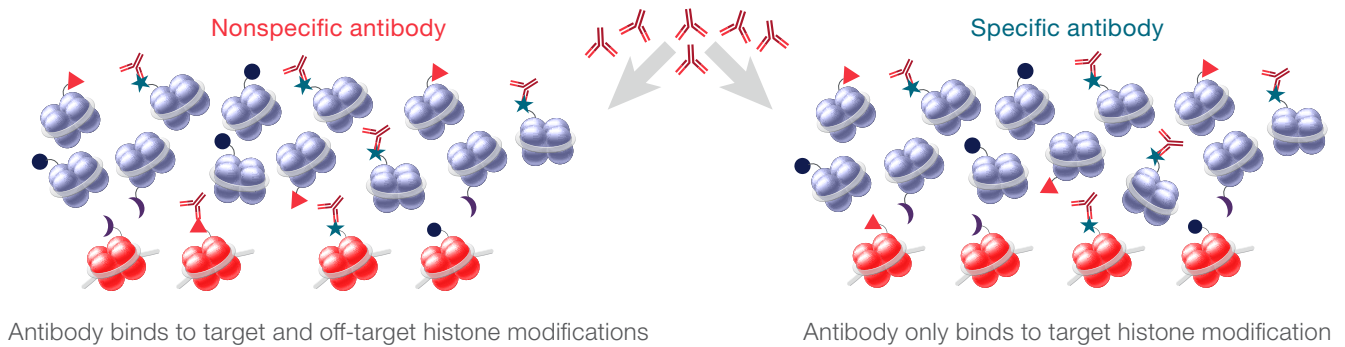
SNAP-ChIP verification

Overview of the SNAP-ChIP approach

1) Spike in SNAP-ChIP panel



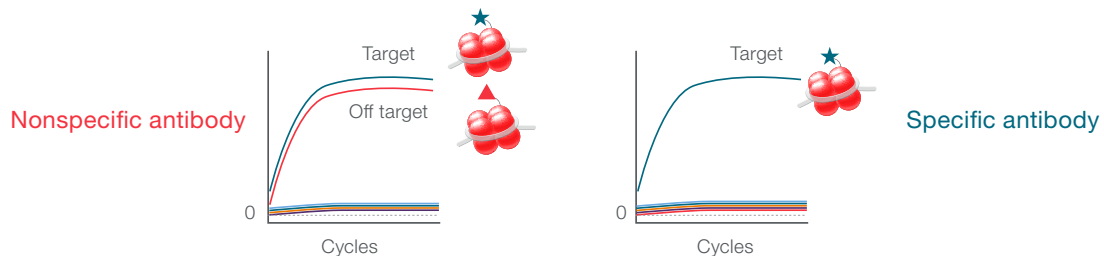
2) Bind an antibody against target histone modification



3) Immunoprecipitate and wash complexes



4) Amplify (by qPCR) barcodes of SNAP-ChIP spike-in panel



Legend

	Native nucleosome from sample		Barcoded synthetic nucleosome		Various modifications on histones		Antibody that is intended to bind to
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Using a SNAP-ChIP panel-verified antibody will give you confidence that your antibody is only binding to its target histone modification.

Find out more at thermofisher.com/snapchip

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