

## Go-ChIP-Grade™ Purified anti-Spt16 (FACT140 complex) Antibody

<b>Catalog# / Size</b>	607007 / 25 µg 607008 / 100 µg
<b>Clone</b>	8D2
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Facilitates Chromatin Transcription (FACT140), Spt 16 protein, Cdc68
<b>Isotype</b>	Mouse IgG2a, κ
<b>Description</b>	Spt16 is a 120-140 kD nuclear protein and a component of the FACT complex (facilitates chromatin transcription). The FACT140 complex is composed of the Spt16 and the SSRP1 proteins. This complex interacts with nucleosomes and histone H2A/H2B dimers to promote nucleosome disassembly and allow transcription elongation. The 8D2 monoclonal antibody recognizes human Spt16 and has been shown to be useful for Western blotting.

### Product Details

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<b>Verified Reactivity</b>	Human, Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Recombinant (full length)
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C.
<b>Application</b>	<a href="#">ChIP - Quality tested</a> <a href="#">WB, ICC - Verified</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by ChIP Assay. The suggested dilution for ChIP application is 1:50 - 1:100 by volume. For immunocytochemistry, a concentration range of 1.0 - 5.0 µg/ml is recommended. For Western blotting, the suggested use of this reagent is 1.0 µg per ml. It is recommended that the reagent to be titrated for optimal performance before each experiment.
<b>Application Notes</b>	25 µg, 100 µg of Go-ChIP-Grade™ Purified Antibody can be used for 2-4, 11-16 immunoprecipitations, respectively, at the recommended dilution. ICC positive in HeLa Cells.
<b>Application References</b> (PubMed link indicates BioLegend citation)	1. Tan B C-M, <i>et al.</i> 2006. <i>EMBO</i> doi:10.1038/sj.emboj.7601271 2. Adelmant G, <i>et al.</i> 2012. <i>Mol Cell Proteomics</i> . 11:411. <a href="#">PubMed</a> 3. Lolis AA, <i>et al.</i> 2013. <i>J Biol Chem</i> . 288:7676. <a href="#">PubMed</a> 4. Shakya A, <i>et al.</i> 2015. <i>Mol Cell Biol</i> . 35:1014. <a href="#">PubMed</a>
<b>RRID</b>	AB_2721597 (BioLegend Cat. No. 607007) AB_2721598 (BioLegend Cat. No. 607008)

### Antigen Details

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<b>Structure</b>	120-140 kD
<b>Distribution</b>	Nuclear
<b>Function</b>	Interacts with nucleosomes and histone H2A/H2B dimers to promote nucleosome disassembly and allow transcription elongation

<b>Interaction</b>	Component of FACT ATP-dependent chromatin remodeling complex, SSRP1 protein in FACT complex, H2A/H2B dimers
<b>Biology Area</b>	Cell Biology, Chromatin Remodeling/Epigenetics, Transcription Factors
<b>Molecular Family</b>	Nuclear Markers
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>1. LeRoy G, <i>et al.</i> 1998. <i>Science</i> 282:1836.</li> <li>2. Orphanides G, <i>et al.</i> 1998. <i>Cell</i> 92:105.</li> <li>3. Orphanides G, <i>et al.</i> 1999. <i>Nature</i> 400:284.</li> </ol>
<b>Gene ID</b>	<a href="#">11198</a>

## Related Protocols

[BioLegend's Tools for Chromatin Immunoprecipitation \(ChIP\) Assays - Video](#)

[Chromatin Immunoprecipitation \(ChIP\) Assay Protocol](#)

[Immunocytochemistry Staining Protocol](#)

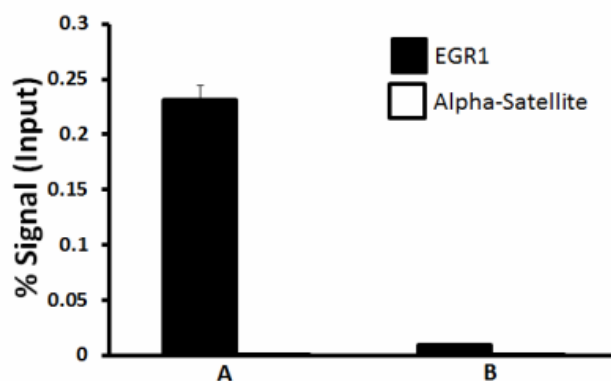
[Western Blotting Protocol](#)

## Other Formats

Go-ChIP-Grade™ Purified anti-Spt16 (FACT140 complex), Purified anti-Spt16 (FACT140 complex)

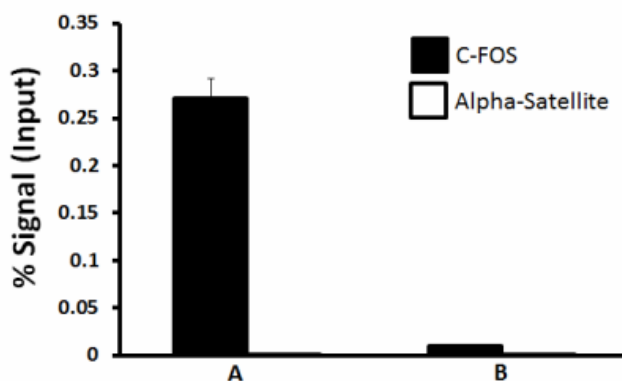
## Product Data

### Go-ChIP-Grade™ Purified anti-SPT16 Antibody (8D2)

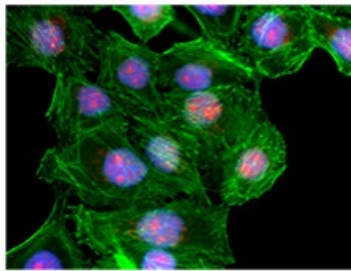
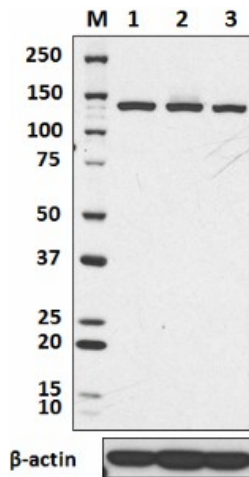


Chromatin Immunoprecipitations (ChIP) were performed with cross-linked chromatin samples from  $4 \times 10^6$  HT29 cells with either A) 1:50 dilution of Go-ChIP-Grade™ Purified anti-Spt16 (FACT140 complex) (clone 8D2, Cat. No. 607007) or B) equal amount of Go-ChIP-Grade™ Purified Mouse IgG2a,  $\kappa$  isotype control antibody (clone MG2a-53, Cat. No. 401505) by using Go-ChIP-Grade™ Protein G Enzymatic Kit (Cat. No. 699904). The enriched DNA was purified and quantified by real-time qPCR using primers targeting human EGR1 gene region or  $\alpha$ -Satellite repeats. The amount of immunoprecipitated DNA in each sample is represented as signal relative to total amount of input chromatin.

### Go-ChIP-Grade™ Purified anti-SPT16 Antibody (8D2)



Chromatin Immunoprecipitations (ChIP) were performed with cross-linked chromatin samples from  $4 \times 10^6$  HT29 cells with either A) 1:50 dilution of Go-ChIP-Grade™ Purified anti-Spt16 (FACT140 complex) (clone 8D2, Cat. No. 607007) or B) equal amount of Go-ChIP-Grade™ Purified Mouse IgG2a,  $\kappa$  isotype control antibody (clone MG2a-53, Cat. No. 401505) by using Go-ChIP-Grade™ Protein G Enzymatic Kit (Cat. No. 699904). The enriched DNA was purified and quantified by real-time qPCR using primers targeting human C-FOS gene region or  $\alpha$ -Satellite repeats. The amount of immunoprecipitated DNA in each sample is represented as signal relative to total amount of input chromatin.



Total lysates (15  $\mu$ g protein) from A549 (lane 1), Jurkat (lane 2), and Raw 264.7 cells (lane 3) were resolved by electrophoresis (4-20% Tris-Glycine gel), transferred to nitrocellulose, and probed with 1:500 diluted (1  $\mu$ g/mL) Purified anti-Spt16 Antibody, clone 8D2 (upper). Proteins were visualized by chemiluminescence detection using a 1:3000 diluted goat anti-mouse-IgG secondary antibody conjugated to HRP for the anti-Spt16 Antibody or 1:5000 diluted Direct-Blot HRP anti- $\beta$ -Actin Antibody, clone 2F1-1(lower). Lane M: Molecular weight ladder.

Hela cells were fixed with 2% paraformaldehyde (PFA) for 10 minutes, permeabilized with 0.5% Triton X-100 for 5 minutes, and blocked with 5% FBS for 30 minutes. Then the cells were intracellularly stained with 5  $\mu$ g/mL anti-Spt16 Antibody (8D2) and followed by DyLight™ 594 goat anti-mouse IgG (red) for one hour at room temperature. Actin filaments were labeled with Alexa Fluor® 488 Phalloidin (green). Nuclei were counterstained with DAPI (blue). The image was captured with a 60X objective.

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