

**SMARCC1/BAF155 (D7F8S) Rabbit mAb**

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<b>Applications:</b> W, IP, ChIP, ChIP-seq, C&R, C&T	<b>Reactivity:</b> H M R Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 155	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #Q92922	<b>Entrez-Gene Id:</b> 6599
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### Product Usage Information

For optimal ChIP and ChIP-seq results, use 5 µl of antibody and 10 µg of chromatin (approximately 4 x 10<sup>6</sup> cells) per IP. This antibody has been validated using SimpleChIP<sup>®</sup> Enzymatic Chromatin IP Kits.

The CUT&RUN dilution was determined using CUT&RUN Assay Kit #86652.

The CUT&Tag dilution was determined using CUT&Tag Assay Kit #77552.

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50
Chromatin IP	1:100
Chromatin IP-seq	1:100
CUT&RUN	1:100
CUT&Tag	1:100

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

SMARCC1/BAF155 (D7F8S) Rabbit mAb recognizes endogenous levels of total SMARCC1/BAF155 protein.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly975 of human SMARCC1/BAF155 protein.

### Background

ATP-dependent chromatin remodeling complexes play an essential role in the regulation of nuclear processes such as transcription and DNA replication and repair (1,2). The SWI/SNF chromatin remodeling complex consists of more than 10 subunits and contains a single molecule of either BRM or BRG1 as the ATPase catalytic subunit. The activity of the ATPase subunit disrupts histone-DNA contacts and changes the accessibility of crucial regulatory elements to the chromatin. The additional core and accessory subunits play a scaffolding role to maintain stability and provide surfaces for interaction with various transcription factors and chromatin (2-5). The interactions between SWI/SNF subunits and transcription factors, such as nuclear receptors, p53, Rb, BRCA1, and MyoD, facilitate recruitment of the complex to target genes for regulation of gene activation, cell growth, cell cycle, and differentiation processes (1,6-9).

SMARCC1/BAF155 is one of the core subunits of the SWI/SNF complex, which is necessary for efficient nucleosome remodeling by BRG1 *in vitro* (10). SMARCC1 is an essential part of the mouse embryonic stem cell specific SWI/SNF complex (esBAF), which is necessary for early embryogenesis, especially proper brain and visceral endoderm development (11-13).

### Background References

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<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	<b>IMPORTANT:</b> For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
<b>Applications Key</b>	<b>W:</b> Western Blotting <b>IP:</b> Immunoprecipitation <b>ChIP:</b> Chromatin IP <b>ChIP-seq:</b> Chromatin IP-seq <b>C&amp;R:</b> CUT&RUN <b>C&amp;T:</b> CUT&Tag
<b>Cross-Reactivity Key</b>	<b>H:</b> Human <b>M:</b> Mouse <b>R:</b> Rat <b>Mk:</b> Monkey
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