


## Product datasheet

# Alexa Fluor® 647 Anti-Hes1 antibody [EPR4226] ab196577

Recombinant RabMAb

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### Overview

<b>Product name</b>	Alexa Fluor® 647 Anti-Hes1 antibody [EPR4226]
<b>Description</b>	Alexa Fluor® 647 Rabbit monoclonal [EPR4226] to Hes1
<b>Host species</b>	Rabbit
<b>Conjugation</b>	Alexa Fluor® 647. Ex: 652nm, Em: 668nm
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	ICC/IF: MCF7 and SK-N-SH cells. Flow Cyt: SHSY5Y cells.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb® patents</a>.</p> <p>Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: (i) in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or</p>

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Store In the Dark.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR4226
<b>Isotype</b>	IgG

## Applications

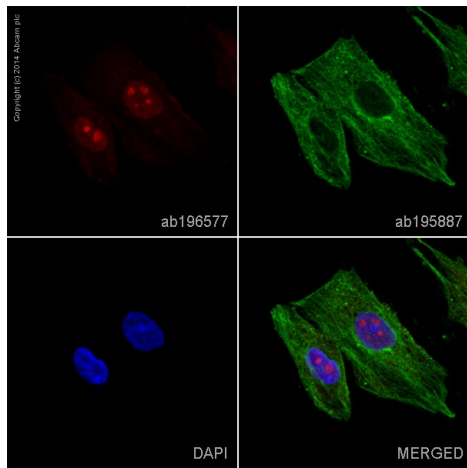
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab196577 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/200. This product gave a positive signal in SK-N-SH cells fixed with 4% formaldehyde (10 min) and 100% methanol (5 min).

## Target

<b>Function</b>	Transcriptional repressor of genes that require a bHLH protein for their transcription. May act as a negative regulator of myogenesis by inhibiting the functions of MYOD1 and ASH1. Binds DNA on N-box motifs: 5'-CACNAG-3' with high affinity and on E-box motifs: 5'-CANNTG-3' with low affinity.
<b>Sequence similarities</b>	Contains 1 basic helix-loop-helix (bHLH) domain. Contains 1 Orange domain.
<b>Domain</b>	Has a particular type of basic domain (presence of a helix-interrupting proline) that binds to the N-box (CACNAG), rather than the canonical E-box (CANNTG). The C-terminal WRPW motif is a transcriptional repression domain necessary for the interaction with Groucho/TLE family members, transcriptional corepressors recruited to specific target DNA by Hairy-related proteins. The bHLH, as well as cooperation between the central Orange domain and the C-terminal WRPW motif, is required for transcriptional repressor activity.
<b>Cellular localization</b>	Nucleus.

## Images



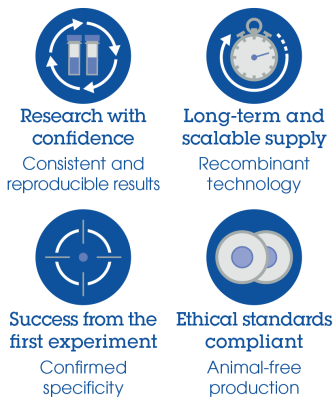
Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-Hes1 antibody [EPR4226] (ab196577)

ab196577 staining Hes1 in SK-N-SH cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab196577 at 1/200 dilution (shown in red) and **ab195887**, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

This product also gave a positive signal under the same testing conditions in SK-N-SH cells fixed with 100% methanol (5min).

### Why choose a recombinant antibody?



Alexa Fluor® 647 Anti-Hes1 antibody [EPR4226] (ab196577)

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