abcam

ab108937

Anti-Hes1 antibody [EPR4226]

Anti-Hes1 antibody [EPR4226] (ab108937) is a rabbit monoclonal antibody detecting Hes1 in **Western Blot, Flow Cytometry (Intra), IHC-P, ICC/IF**. Suitable for **Human, Rat**.

- Biophysical QC for unrivalled batch-batch consistency
- Over 80 publications

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR4226
Purification technique	Affinity purification Protein A
Concentration	0.112 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human

Dilution info	1/90 - 1/200
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

IP

Not recommended

Species	Rat, Human, Mouse
Dilution info	-
Notes	-

WB

Tested

Species	Rat
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/1000
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/20 - 1/50
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

Species	Rat

Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information HES1

Function	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 (By similarity). May play a role in a functional FA core complex response to DNA cross-link damage, being required for the stability and nuclear localization of FA core complex proteins, as well as for FANCD2 monoubiquitination in response to DNA damage.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Stable for 12 months at -20°C

Notes

What is this antibody validated in?
Anti-Hes1 antibody [EPR4226] (ab108937) is a rabbit recombinant monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Immunohistochemistry (IHC-P),

Immunocytochemistry/immunofluorescence (ICC/IF) in Human, Rat samples.

What is the molecular weight of Hes1?
Anti-Hes1 [EPR4226] (ab108937) specifically detects a band for Hes1 (UniProt: Q14469) at a molecular weight of 30kDa.

Trusted by the scientific community
Anti-Hes1 [EPR4226] (ab108937) was first used in a scientific publication in 2011 and has been cited over 80 times in peer-reviewed journals.

Reviewed by scientists
Anti-Hes1 [EPR4226] (ab108937) has over 10 independent reviews from customers.

Other related products
We have a range of other formats of antibody clone [EPR4226] also available for your convenience: ab108937, Alexa Fluor® 488 - ab196328, Alexa Fluor® 647 - ab196577, Alexa Fluor® 594 - ab207048, Carrier free - ab221788, PE - ab225087

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Trial sizes available!
Test your antibody or perform pre-screening before committing to a larger quantity. Sold in 20µl. Discover our selection of trial-size antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

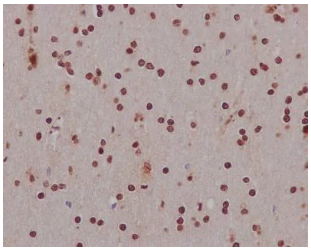
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

6 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hes1 antibody [EPR4226] (ab108937)

Hes1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Hes1 antibody

Primary ab concentration dilution: 1:200, (0.5ug/ml)
Secondary ab: ImmunoHistoprobe (Ready to use) HRP Polymer for Rabbit IgG

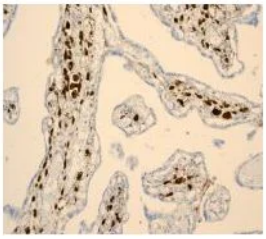
Secondary ab concentration: Prediluted

Tissue: Human brain

Fixative: Paraffin-embedded sections

Counter stain: Hematoxylin

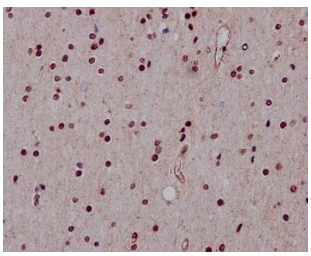
Antigen retrieval: Perform heat mediated antigen retrieval using Tris/EDTA Buffer, PH9



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hes1 antibody [EPR4226] (ab108937)

Hes1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Hes1 antibody

Immunohistochemical staining of Hes1 in paraffin-embedded human placenta tissue with unpurified ab108937 at 1/250 dilution.
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

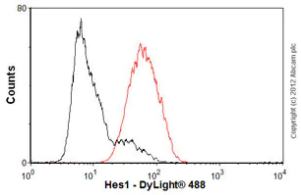


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hes1 antibody [EPR4226] (ab108937)

Hes1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Hes1 antibody

Immunohistochemical staining of paraffin embedded human brain with unpurified ab108937 at a working dilution of 1 in 90. The secondary antibody used is a HRP polymer for rabbit IgG. The

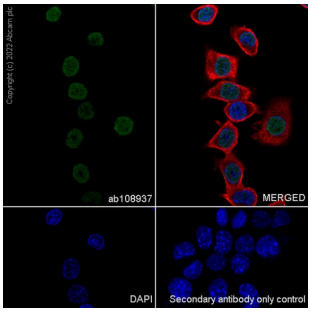
sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0.



Flow Cytometry (Intracellular) - Anti-Hes1 antibody [EPR4226] (ab108937)

Hes1 Flow Cytometry (Intracellular) staining using rabbit Anti-Hes1 antibody

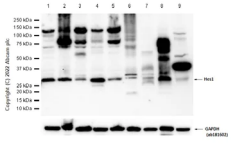
Overlay histogram showing SH-SY5Y cells stained with unpurifiedab108937 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab108937 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10^6 cells) used under the same conditions. Acquisition of >5000 events was performed.



Immunocytochemistry/ Immunofluorescence - Anti-Hes1 antibody [EPR4226] (ab108937)

Hes1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Hes1 antibody

Immunofluorescent analysis of 4% Paraformaldehyde fixed 0.1% TritonX-100 permeabilised SH-SY5Y (Human neuroblastoma epithelial cell) labelling Hes1 with ab108937 at 1/1000 dilution, followed by AlexaFluor® 488 Goat anti-Rabbit secondary (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear staining in SH-SY5Y cell line is observed. Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) was used to counterstain alpha Tubulin at 1/200 dilution (red). The Nuclear counterstain was DAPI (blue).
Secondary antibody only control: Secondary antibody is AlexaFluor® 488 Goat anti-Rabbit secondary (ab150077) at 1/1000 dilution.



Western blot - Anti-Hes1 antibody [EPR4226] (ab108937)

Hes1 Western blot staining using rabbit Anti-Hes1 antibody

Blocking and diluting buffer and concentration: 5% NFDM /TBST.
All lanes:
Western blot - Anti-Hes1 antibody [EPR4226] (ab108937) at 1/1000 dilution

Lane 1:
SH-SY5Y (Human bone marrow epithelial) whole cell lysate at 20 µg

Lane 2:
MOLT-4 (Human lymphoblastic leukemia T lymphoblast) whole cell lysate at 20 µg

Lane 3:
MDA-MB-231 (Human breast adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 4:
MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 5:
K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate at 20 µg

Lane 6:
HUVEC (Human umbilical vein endothelial cell) whole cell lysate at 20 µg

Lane 7:
HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate at 20 µg

Lane 8:
Human brain tissue lysate at 20 µg

Lane 9:
Human liver tissue lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/20000 dilution

Predicted band size: 30 kDa

Observed band size: 30 kDa

Exposure time: 120s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.