abcam

Product datasheet

Anti-L1CAM antibody [EPR18750] - BSA and Azide free ab271982

KO VALIDATED | Recombinant | RabMAb

12 Images

Overview

Product name	Anti-L1CAM antibody [EPR18750] - BSA and Azide free
Description	Rabbit monoclonal [EPR18750] to L1CAM - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IP, IHC-P, WB
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Recombinant fragment within Human L1CAM aa 600-850. The exact sequence is proprietary. Database link: P32004
Positive control	WB: Human fetal brain and cerebellum lysates; HeLa and A-375 whole cell lysates; Rat brain, cerebellum and hippocampus lysates. Mouse cerebellum and brain lysates. IHC-P: Human kidney, Human stomach cancer, Mouse cerebrum, Mouse colon, Rat cerebellum and Rat colon tissues. IP: Human cerebellum and Rat brain lysates.
General notes	ab271982 is the carrier-free version of ab208155. This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes. Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency. Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. *Maxpar® is a trademark of Fluidigm Canada Inc.* 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 production For more information see here. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR18750
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab271982** in the following tested applications.

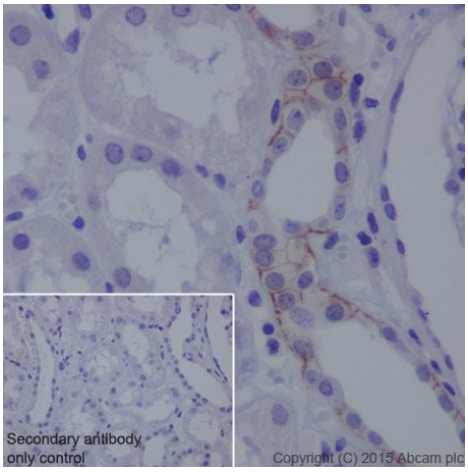
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 140 kDa.

Target

Function	Cell adhesion molecule with an important role in the development of the nervous system. Involved in neuron-neuron adhesion, neurite fasciculation, outgrowth of neurites, etc. Binds to axonin on neurons.
Involvement in disease	Defects in L1CAM are the cause of hydrocephalus due to stenosis of the aqueduct of Sylvius (HSAS) [MIM:307000]. Hydrocephalus is a condition in which abnormal accumulation of cerebrospinal fluid in the brain causes increased intracranial pressure inside the skull. This is usually due to blockage of cerebrospinal fluid outflow in the brain ventricles or in the subarachnoid space at the base of the brain. In children is typically characterized by enlargement of the head, prominence of the forehead, brain atrophy, mental deterioration, and convulsions. In adults the syndrome includes incontinence, imbalance, and dementia. HSAS is characterized by mental retardation and enlarged brain ventricles. Defects in L1CAM are the cause of mental retardation-aphasia-shuffling gait-adducted thumbs syndrome (MASA) [MIM:303350]; also known as corpus callosum hypoplasia, psychomotor retardation, adducted thumbs, spastic paraparesis, and hydrocephalus or CRASH syndrome. MASA is an X-linked recessive syndrome with a highly variable clinical spectrum. Main clinical features include spasticity and hyperreflexia of lower limbs, shuffling gait, mental retardation, aphasia and adducted thumbs. The features of spasticity have been referred to as complicated spastic paraplegia type 1 (SPG1). Some patients manifest corpus callosum hypoplasia and hydrocephalus. Inter- and intrafamilial variability is very wide, such that patients with hydrocephalus, MASA, SPG1, and agenesis of corpus callosum can be present within the same family. Defects in L1CAM are the cause of spastic paraplegia X-linked type 1 (SPG1) [MIM:303350]. Spastic paraplegia is a degenerative spinal cord disorder characterized by a slow, gradual, progressive weakness and spasticity of the lower limbs. Note=Defects in L1CAM may contribute to Hirschsprung disease by modifying the effects of Hirschsprung disease-associated genes to cause intestinal aganglionosis. Defects in L1CAM are a cause of partial agenesis of the corpus callosum (ACCPX) [MIM:304100]. A syndrome characterized by partial corpus callosum agenesis, hypoplasia of inferior vermis and cerebellum, mental retardation, seizures and spasticity. Other features include microcephaly, unusual facies, and Hirschsprung disease in some patients.
Sequence similarities	Belongs to the immunoglobulin superfamily. L1/neurofascin/NgCAM family. Contains 5 fibronectin type-III domains. Contains 6 Ig-like C2-type (immunoglobulin-like) domains.
Cellular localization	Cell membrane.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-L1CAM antibody [EPR18750] (ab271982)

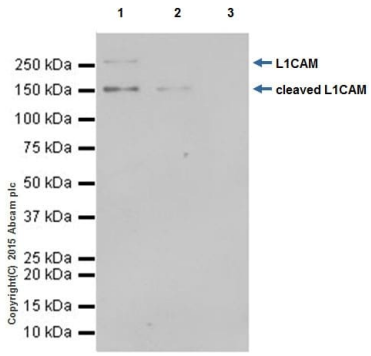
Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Membrane staining on a part of Human kidney tubules is observed. L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab208155).

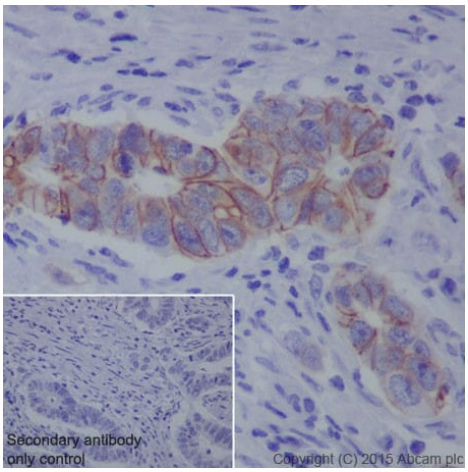


Immunoprecipitation - Anti-L1CAM antibody [EPR18750] (ab271982)

L1CAM was immunoprecipitated from 1mg of Rat brain whole cell lysate with ab208155 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab208155 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: Rat brain whole cell lysate 10µg (Input).
Lane 2: ab208155 IP in Rat brain whole cell lysate.
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab208155 in Rat brain whole cell lysate.
Blocking and dilution buffer and concentration: 5% NFDM/TBST.
Exposure time: 3 minutes.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab208155).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-L1CAM antibody [EPR18750] (ab271982)

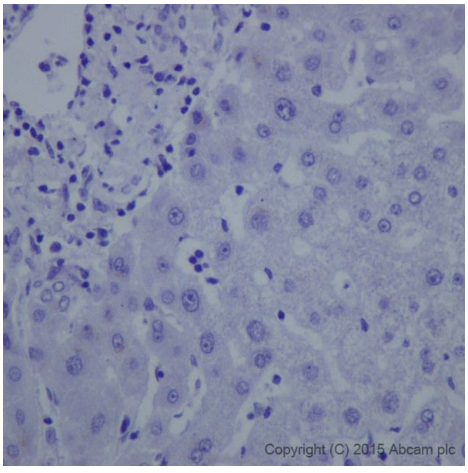
Immunohistochemical analysis of paraffin-embedded Human stomach cancer tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Membrane staining on the tumor cells of Human stomach cancer is observed.
L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab208155).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-L1CAM antibody [EPR18750] (ab271982)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

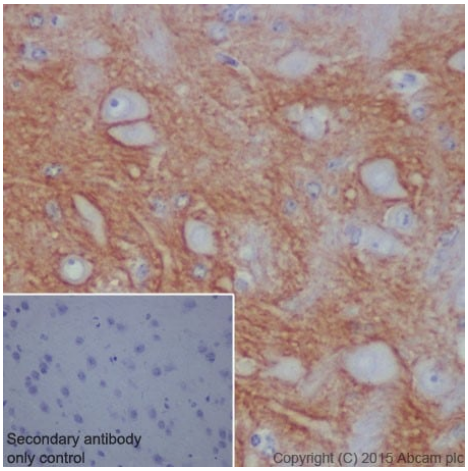
Negative staining on the Human liver.

L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab208155).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-L1CAM antibody [EPR18750] (ab271982)

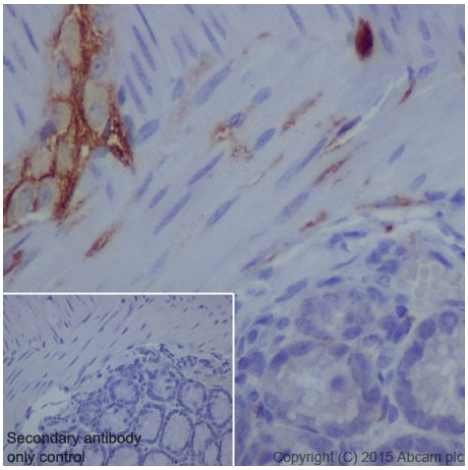
Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasm staining on the mouse cerebrum is observed. L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab208155).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-L1CAM antibody [EPR18750] (ab271982)

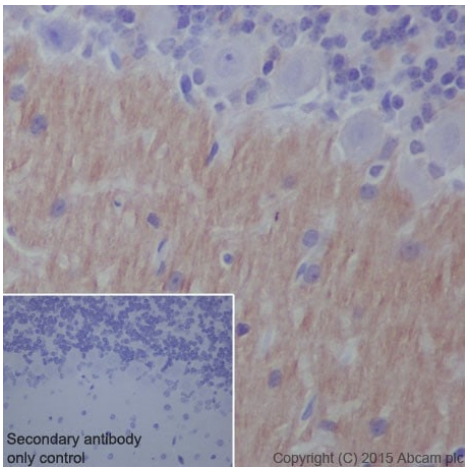
Immunohistochemical analysis of paraffin-embedded Mouse colon tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Mainly membrane staining on the nerve tract of mouse colon is observed.
L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab208155).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-L1CAM antibody [EPR18750] (ab271982)

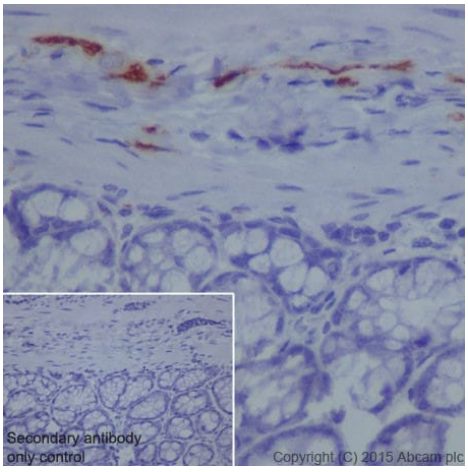
Immunohistochemical analysis of paraffin-embedded Rat cerebellum tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasm staining on the molecular layer of the rat cerebellar cortex is observed.
L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab208155).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-L1CAM antibody [EPR18750] (ab271982)

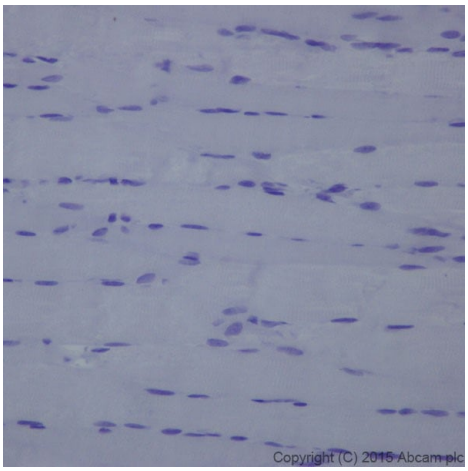
Immunohistochemical analysis of paraffin-embedded Rat colon tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasm staining on the nerve tract of the rat colon is observed.
L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab208155).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-L1CAM antibody [EPR18750] (ab271982)

Immunohistochemical analysis of paraffin-embedded Rat skeletal muscle tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

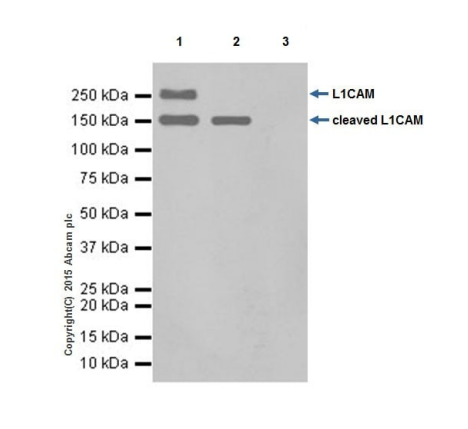
Negative staining on the rat skeletal muscle.
L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab97051 at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab208155).

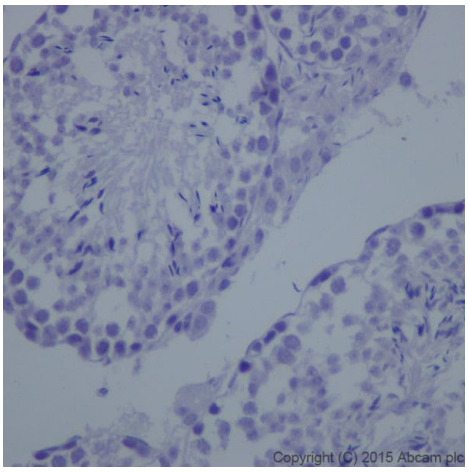


Immunoprecipitation - Anti-L1CAM antibody [EPR18750] (ab271982)

L1CAM was immunoprecipitated from 1mg of Human cerebellum lysate with ab208155 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab208155 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: Human cerebellum lysate 10µg (Input).
Lane 2: ab208155 IP in Human cerebellum lysate.
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab208155 in Human cerebellum lysate.
Blocking and dilution buffer and concentration: 5% NFDM/TBST.
Exposure time: 3 minutes.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab208155).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-L1CAM antibody [EPR18750] (ab271982)

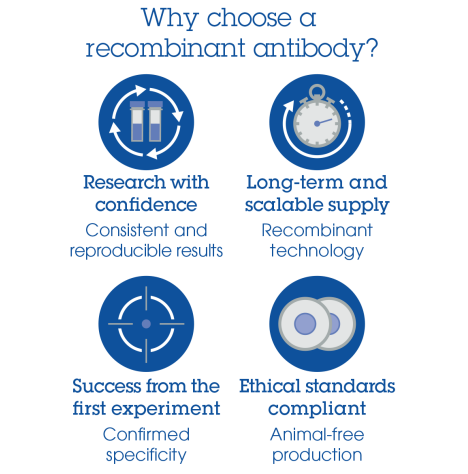
Immunohistochemical analysis of paraffin-embedded Mouse testis tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Negative staining on the mouse testis.
L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab208155).



Anti-L1CAM antibody [EPR18750] - BSA and Azide free (ab271982)

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