

# Anti-SPARC antibody [EPR25122-122] - BSA and Azide free ab290647

Recombinant RabMAb

13 Images

### Overview

<b>Product name</b>	Anti-SPARC antibody [EPR25122-122] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR25122-122] to SPARC - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Specificity</b>	This antibody does not react with Rat species for IHC application.
<b>Tested applications</b>	<b>Suitable for:</b> WB, Flow Cyt (Intra), IP, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat <b>Does not react with:</b> Human
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Mouse brain, heart, placenta tissue lysate. Rat brain, heart, placenta tissue lysates. C2C12, Neuro-2a, bEnd.3 and C6 whole cell lysate, untreated mouse and rat brain tissue lysate, mouse and rat brain tissue lysate treated with Protein Deglycosylation MIX II. Flow Cyt (intra): rat and mouse primary neuron cells. IP: Neuro-2a whole cell lysate, rat brain tissue. IHC-P: mouse hepatocellular, kidney, cerebrum tissues. ICC/IF: Permeabilized bEnd.3 and C6 cells.
<b>General notes</b>	<p>ab290647 is a carrier free version of <a href="#">ab290636</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <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>

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

## Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C.
Storage buffer	pH: 7.2 Constituent: 100% PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR25122-122
Isotype	IgG

## Applications

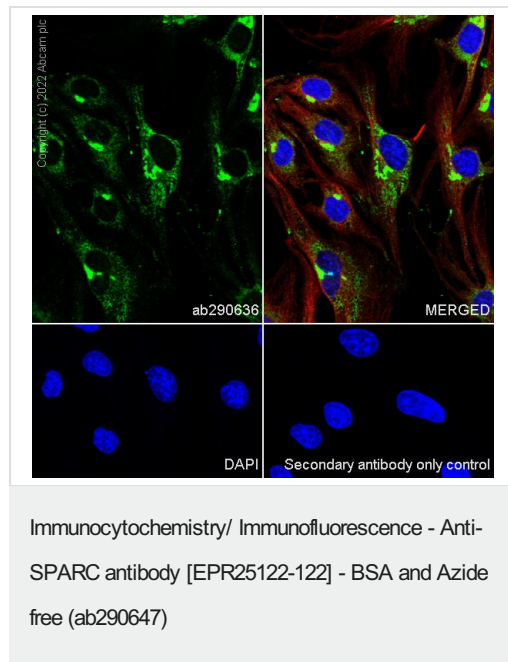
**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab290647 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 35 kDa.
Flow Cyt (Intra)		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

## Target

Function	Appears to regulate cell growth through interactions with the extracellular matrix and cytokines. Binds calcium and copper, several types of collagen, albumin, thrombospondin, PDGF and cell membranes. There are two calcium binding sites; an acidic domain that binds 5 to 8 Ca(2+) with a low affinity and an EF-hand loop that binds a Ca(2+) ion with a high affinity.
Sequence similarities	Belongs to the SPARC family. Contains 1 EF-hand domain. Contains 1 follistatin-like domain. Contains 1 Kazal-like domain.
Developmental stage	Expressed at high levels in tissues undergoing morphogenesis, remodeling and wound repair.
Cellular localization	Secreted > extracellular space > extracellular matrix > basement membrane. In or around the

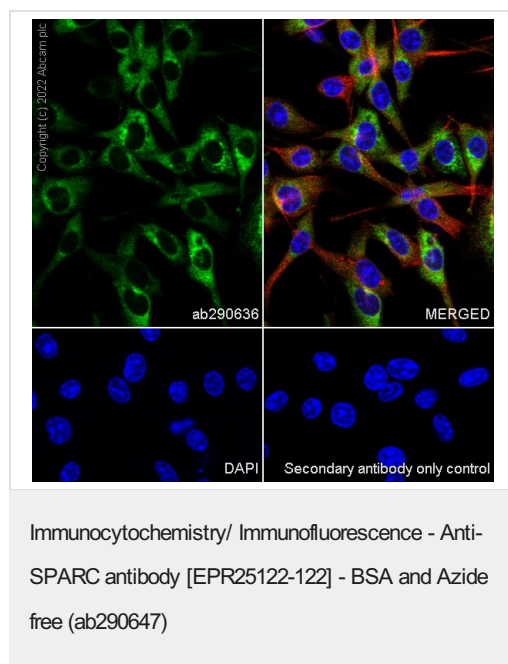
## Images



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized bEnd.3 (mouse brain endothelioma cell line) cells labelling SPARC with primary antibody anti-SPARC (**ab290636**) at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150081**) secondary antibody at 1/1000 dilution (2.0 µg/mL). Confocal image showing cytoplasmic staining in bEnd.3 cells. Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) was used to counterstain tubulin at 1/200 dilution (2.5 µg/mL). The nuclear counter stain is DAPI (blue).

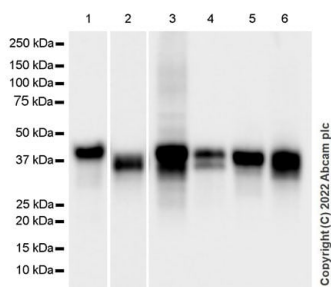
The secondary antibody only control is : Secondary antibody is **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (2.0 µg/mL).

This data was developed using **ab290636**, the same antibody clone in a different buffer formulation.



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized C6 (rat glial tumour cell line) cells labelling SPARC with primary antibody anti-SPARC (**ab290636**) at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150081**) secondary antibody at 1/1000 dilution (2.0 µg/mL). Confocal image showing cytoplasmic staining in C6 cells. Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) was used to counterstain tubulin at 1/200 dilution (2.5 µg/mL). The nuclear counter stain is DAPI (blue). The secondary antibody only control is : Secondary antibody is **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (2.0 µg/mL).

This data was developed using **ab290636**, the same antibody clone in a different buffer formulation.



Western blot - Anti-SPARC antibody [EPR25122-122] - BSA and Azide free (ab290647)

**All lanes** : Anti-SPARC antibody [EPR25122-122] ([ab290636](#)) at 1/1000 dilution

**Lane 1** : Mouse brain tissue lysate

**Lane 2** : Mouse heart tissue lysate

**Lane 3** : Mouse placenta tissue lysate

**Lane 4** : Rat brain tissue lysate

**Lane 5** : Rat heart tissue lysate

**Lane 6** : Rat placenta tissue lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

**Predicted band size:** 35 kDa

**Observed band size:** 40, 37 kDa

This data was developed using [ab290636](#), the same antibody clone in a different buffer formulation.

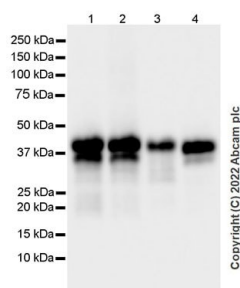
Blocking and diluting buffer and concentration was 5% NFDM/TBST.

The expression profile/molecular weight observed is consistent with that described in the literature (PMID: 29449802; PMID: 9008236). The additional band is expected to be a SPARC cleavage product (PMID: 9008236).

Exposure time:

Lane 2: 5.5 seconds

Lane 1, 3-6: 3.25 seconds



Western blot - Anti-SPARC antibody [EPR25122-122] - BSA and Azide free (ab290647)

**All lanes :** Anti-SPARC antibody [EPR25122-122] ([ab290636](#)) at 1/1000 dilution

**Lane 1 :** C2C12 (mouse myoblast) whole cell lysate

**Lane 2 :** bEnd.3 (mouse brain endothelioma) whole cell lysate

**Lane 3 :** Neuro-2a (mouse neuroblastoma) whole cell lysate

**Lane 4 :** C6 (rat glioma) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

**Predicted band size:** 35 kDa

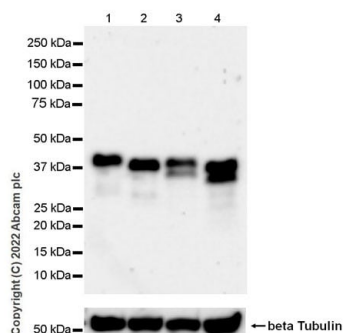
**Observed band size:** 40, 37 kDa

This data was developed using [ab290636](#), the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration was 5% NFDm/TBST.

Exposure time: 3.25 seconds.

The expression profile/molecular weight observed is consistent with that described in the literature (PMID: 29449802; PMID: 9008236). The additional band is expected to be a SPARC cleavage product (PMID: 9008236).



Western blot - Anti-SPARC antibody [EPR25122-122] - BSA and Azide free (ab290647)

**All lanes :** Anti-SPARC antibody [EPR25122-122] ([ab290636](#)) at 1/1000 dilution

**Lane 1 :** Untreated mouse brain tissue lysate

**Lane 2 :** Mouse brain tissue lysate treated with Protein Deglycosylation MIX II

**Lane 3 :** Untreated rat brain tissue lysate

**Lane 4 :** Rat brain tissue lysate treated with Protein Deglycosylation MIX II

Lysates/proteins at 15 µg per lane.

## Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

**Predicted band size:** 35 kDa

**Observed band size:** 40, 37 kDa

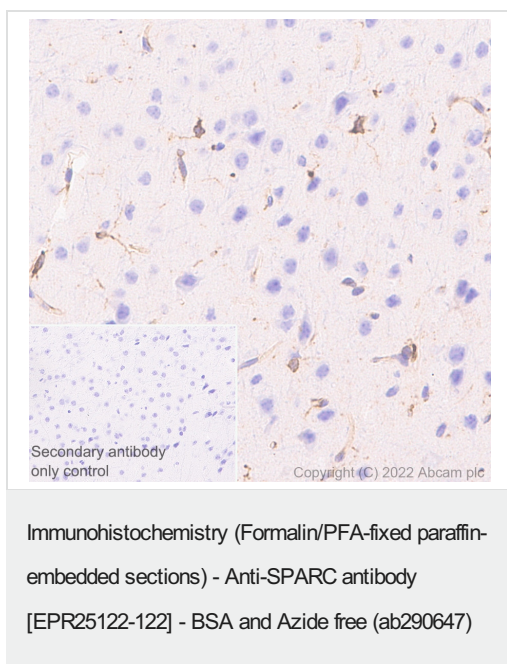
**Exposure time:** 103 seconds

This data was developed using [ab290636](#), the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration was 5% NFDM/TBST.

The expression profile/molecular weight observed is consistent with that described in the literature (PMID: 29449802; PMID: 9008236). SPARC is a glycosylated protein and can be deglycosylated by Protein Deglycosylation MIX II.

The additional band is expected to be a SPARC cleavage product (PMID: 9008236).

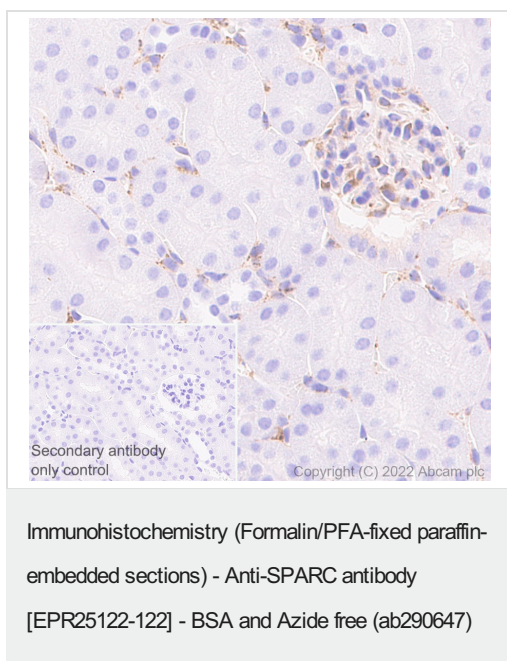


This data was developed using [ab290636](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labelling SPARC with [ab290636](#) at 1/15000 (0.041 µg/ml) followed by a ready to use LeicaDS9800 (BOND™ Polymer Refine Detection) . Positive staining on microglia of mouse cerebrum. The section was incubated with [ab290636](#) for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (BOND™ Polymer Refine Detection) .

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

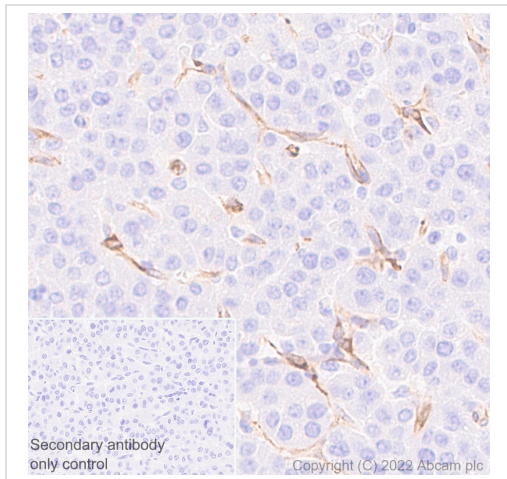


This data was developed using [ab290636](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Mouse kidney tissue labelling SPARC with [ab290636](#) at 1/15000 (0.041 µg/ml) followed by a ready to use LeicaDS9800 (BOND™ Polymer Refine Detection) . Positive staining on glomerulus and endothelium of mouse kidney. The section was incubated with [ab290636](#) for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (BOND™ Polymer Refine Detection) .

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



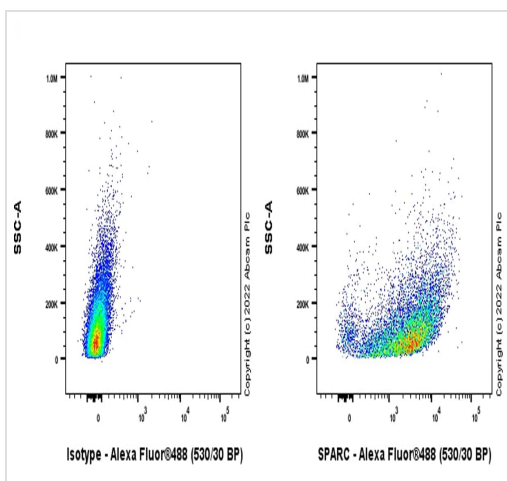
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SPARC antibody [EPR25122-122] - BSA and Azide free (ab290647)

This data was developed using [ab290636](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded mouse hepatocellular tissue labelling SPARC with [ab290636](#) at 1/15000 (0.041 µg/ml) followed by a ready to use LeicaDS9800 (BOND™ Polymer Refine Detection) . Positive staining on interstitial cells of mouse hepatocellular carcinoma. The section was incubated with [ab290636](#) for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (BOND™ Polymer Refine Detection) .

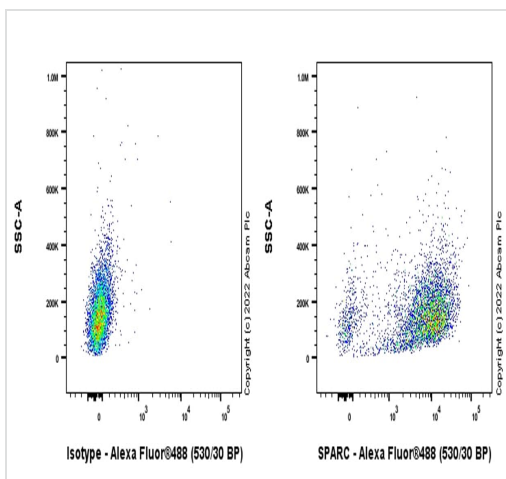
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Flow Cytometry (Intracellular) - Anti-SPARC antibody [EPR25122-122] - BSA and Azide free (ab290647)

This data was developed using [ab290636](#), the same antibody clone in a different buffer formulation.

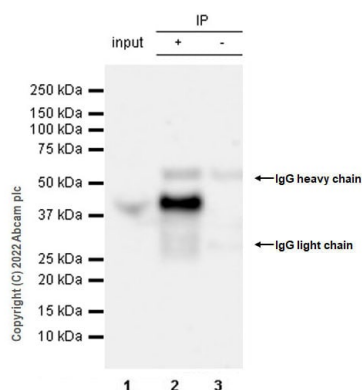
Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Mouse primary neuron cell cells labelling SPARC with [ab290636](#) at 1/600 dilution (0.1 µg) (Right) compared with a Rabbit monoclonal IgG ([ab172730](#)) (Left) isotype control 0. A Goat Anti-Rabbit IgG (Alexa Fluor® 488, [ab150081](#)) at 1/2000 dilution was used as the secondary antibody.



Flow Cytometry (Intracellular) - Anti-SPARC antibody [EPR25122-122] - BSA and Azide free (ab290647)

This data was developed using [ab290636](#), the same antibody clone in a different buffer formulation.

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Rat primary neuron cells labelling SPARC with [ab290636](#) at 1/600 dilution (0.1 µg) (Right) compared with a Rabbit monoclonal IgG ([ab172730](#)) (Left). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, [ab150081](#)) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-SPARC antibody [EPR25122-122] - BSA and Azide free (ab290647)

This data was developed using [ab290636](#), the same antibody clone in a different buffer formulation.

SPARC was immunoprecipitated from Neuro-2a (mouse neuroblastoma neuroblast) whole cell lysate with [ab290636](#) at 1/30 dilution (2 µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using [ab290636](#) at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)([ab131366](#)) was used at 1/5000 dilution.

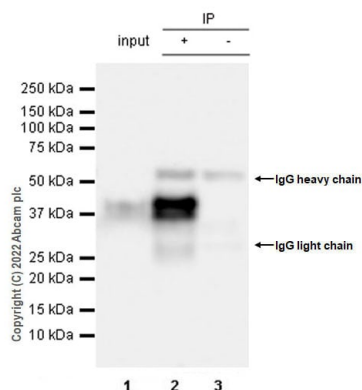
**Lane 1:** Neuro-2a (mouse neuroblastoma neuroblast) whole cell lysate 10 µg

**Lane 2:** [ab290636](#) IP in Neuro-2a whole cell lysate

**Lane 3:** Rabbit monoclonal IgG ([ab172730](#)) instead of [ab290636](#) in Neuro-2a whole cell lysate

**Blocking and dilution buffer and concentration:** 5% NFDM/TBST.

**Exposure time:** 10 seconds



Immunoprecipitation - Anti-SPARC antibody  
[EPR25122-122] - BSA and Azide free (ab290647)

This data was developed using [ab290636](#), the same antibody clone in a different buffer formulation.

SPARC was immunoprecipitated from rat brain tissue lysate with [ab290636](#) at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using [ab290636](#) at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP) ([ab131366](#)) was used at 1/5000 dilution.

**Lane 1:** Rat brain tissue lysate 10 µg

**Lane 2:** [ab290636](#) IP in Rat brain tissue lysate

**Lane 3:** Rabbit monoclonal IgG ([ab172730](#)) instead of [ab290636](#) in rat brain tissue lysate

**Blocking and dilution buffer and concentration:** 5% NFDM/TBST.

**Exposure time:** 10 seconds

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-SPARC antibody [EPR25122-122] - BSA and Azide free (ab290647)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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