

## Product datasheet

# Anti-SPON1 antibody **ab40797**

★★★★☆ 1 Abreviews 5 References 2 Images

### Overview

<b>Product name</b>	Anti-SPON1 antibody
<b>Description</b>	Rabbit polyclonal to SPON1
<b>Tested applications</b>	<b>Suitable for:</b> IHC-FoFr, ICC/IF, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat <b>Predicted to work with:</b> Cow, Human
<b>Immunogen</b>	Synthetic peptide conjugated to KLH derived from within residues 750 to the C-terminus of Rat SPON1. Read Abcam's proprietary immunogen policy (Peptide available as <a href="#">ab41539</a> .)
<b>Positive control</b>	This antibody gave a positive signal in the following tissue lysates: Rat Brain; Rat Spinal Cord; Mouse Ovary; Mouse 14 day fetal lysate.

### 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 or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

Our [Abpromise guarantee](#) covers the use of **ab40797** 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
IHC-FoFr	★★★★☆	1/1000.
ICC/IF		Use a concentration of 5 µg/ml.

Application	Abreviews	Notes
WB		Use a concentration of 2 µg/ml. Detects a band of approximately 91 kDa (predicted molecular weight: 91 kDa).

## Target

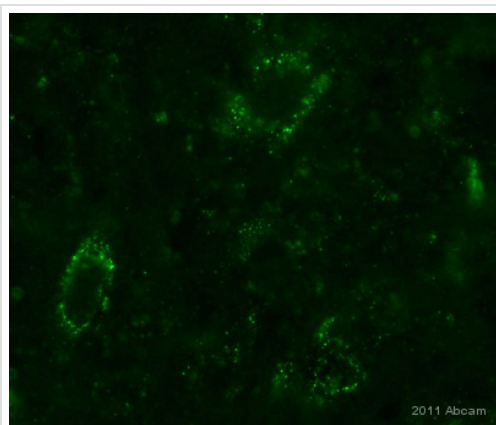
### Relevance

SPON1 is a member of a subgroup of the thrombospondin type 1 (TSR) class molecules, defined by two domains of homology, the FS1/FS2 and TSR domains. The TSRs of SPON1 proteins are typical of class 2 TSRs. SPON1, which is similar to thrombospondin, is an extracellular matrix attached molecule that promotes neurite outgrowth and inhibits angiogenesis. Analysis of gain and loss of function experiments reveal that SPON1 is required for accurate pathfinding of embryonic axons, and plays a dual role in patterning axonal trajectories. It promotes the outgrowth of commissural and inhibits the outgrowth of motor axons, and has also been implicated in inflammatory processes in the nervous system.

### Cellular localization

Secreted protein; extracellular space; extracellular matrix.

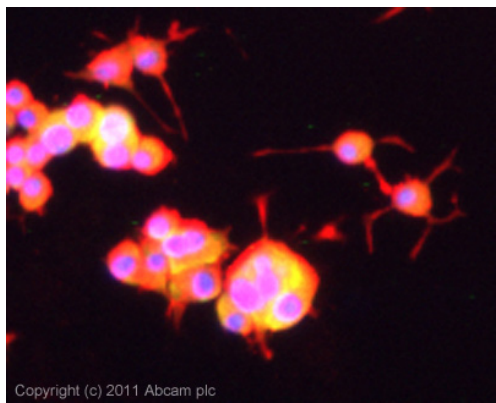
## Images



Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-SPON1 antibody (ab40797)

This image is courtesy of an abreview submitted by Sophie Pezet, ESPCI, France

IHC-FoFr image of SPON1 staining on Mouse Spinal Cord using ab40797 (1:1000). The sections used came from animals perfused fixed with Paraformaldehyde 4% with 15% of a solution of saturated picric acid, in phosphate buffer 0.1M. Following postfixation in the same fixative overnight, the spinal cord were cryoprotected in sucrose 30% overnight. Spinal cords were then cut using a cryostat and the immunostainings were performed using the 'free floating' technique.



Immunocytochemistry/ Immunofluorescence - Anti-SPON1 antibody (ab40797)

ICC/IF image of ab40797 stained PC12 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab40797, 5µg/ml) overnight at +4°C. The secondary antibody (green) was ab96899 Dylight 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <http://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors