

Product datasheet

Streptavidin (HRP) ab7403

★★★★★ 6 Abreviews 121 References 2 Images

Description

Product name	Streptavidin (HRP)	
Biological activity	Binds to Biotin. Dissociation constant has not been measured.	
Purity	<p>> 95 % SDS-PAGE.</p> <p>Chromatographically pure, a single band by SDS-PAGE. Streptavidin-HRP was prepared from chromatographically purified streptavidin. Streptavidin Peroxidase conjugate was assayed by immunoelectrophoresis resulted in a single precipitin arc against anti-Peroxidase and anti-Streptavidin.</p>	
Expression system	Native	
Accession	P22629	
Protein length	Full length protein	
Animal free	No	
Nature	Native	
Species	Streptomyces avidinii	
Sequence	<pre>MRKIVVAAIAVSLTTVSITASASADPSKDSKAQVSAAEAGI TGTWYNQLG STFMV TAGADGALTGTYESAVGNAESRYVLTGRYDSAPAT DGSGTALGWT VAWKNNYRNAHSATTWSGQYVGGAEARINTQWLLTSGTT EANAWKSTLVG HDTFTKVKPSAASIDAACKAGVNNGNPLDAVQQ</pre>	
Conjugation	HRP	
Description	Native Streptavidin protein (HRP)	

Specifications

Our [Abpromise guarantee](#) covers the use of **ab7403** in the following tested applications.

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

Applications	Dot blot
	ELISA
	Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)
	Immunohistochemistry (Frozen sections)

Immunomicroscopy
Immunocytochemistry
Western blot

Form

Liquid

Additional notes

Horseradish peroxidase is conjugated to the streptavidin tetramer at ~1:1 molar ratio.

This product has been assayed against 1.0 µg of Biotinylated IgG in a standard capture ELISA using a [peroxidase substrate as ABTS ab142041](#) as a substrate for 30 minutes at room temperature. A working dilution of 1:15,000 to 1:60,000 of the reconstitution concentration is suggested for this product. Optimal titers for other applications should be determined by the researcher.

Preparation and Storage

Stability and Storage

Shipped at 4°C. Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.

Preservative: 0.01% Gentamicin sulphate

Constituents: 0.424% Potassium phosphate, 0.87% Sodium chloride, BSA

This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

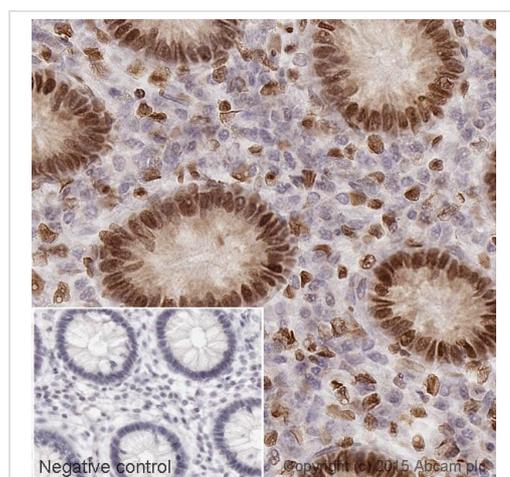
Relevance

Streptavidin is a tetrameric protein purified from *Streptomyces* sp. that binds very tightly to the vitamin biotin with a Kd of ~ 10-14 mol/l. The high affinity recognition of biotin and biotinylated molecules has made streptavidin one of the most important components in diagnostics and laboratory kits.

Cellular localization

Cytoplasmic

Images

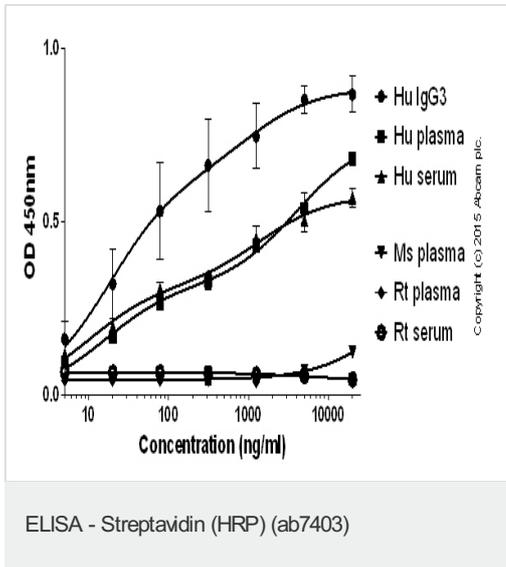


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Streptavidin (HRP) (ab7403)

IHC image of Histone H1 staining in a section of formalin-fixed paraffin-embedded [human normal colon]*. The section was pre-treated using pressure cooker heat mediated antigen retrieval with sodium citrate buffer (pH6) for 30mins. The section was then incubated with [ab11080](#), 1/1000 dilution, for 15 mins at room temperature. A goat anti-mouse biotinylated secondary antibody ([ab6788](#), 1/1000 dilution), was used to detect the primary, and visualized using an HRP conjugated ABC system. Streptavidin HRP was used, [ab7403](#) at a 1/10000 dilution. DAB was used as the chromogen ([ab103723](#)), diluted 1/100 and incubated for 10min at room temperature. The section was then counterstained with haematoxylin and mounted with DPX. The inset negative control image is taken from an identical assay without primary antibody. For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen

retrieval conditions, primary antibody concentration and antibody incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



The wells were coated with [ab200699](#) at 1 µg/ml at 50 µl/well overnight at 4°C, followed by a 5% BSA blocking step for 2h RT. Human IgG3 ([ab138703](#)) was then added starting at 20 µg/ml and plasma/serum at 1:500 and gradually diluted 1:4, 50 µl/well for 2h. [Ab201248](#) was then added at 1:10,000 dilution, 50 µl/well for 2h. A HRP-streptavidin ([ab7403](#)) was used at 1:10,000 dilution for 1h.

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

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