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Datasheet for 100-4195

Streptavidin Antibody

Overview

Description:	Anti-Streptavidin (RABBIT) Antibody - 100-4195
Item No.:	100-4195
Size:	2 mL
Applications:	Dot Blot, ELISA, WB, IF
Reactivity:	Streptavidin
Host Species:	Rabbit

Product Details

Background:	Anti-streptavidin antibody detects Streptavidin, a 60 kDa protein purified from the bacterium Streptomyces avidinii. Streptavidin is a homo-tetrameric protein having a very high affinity for biotin (vitamin B7). Streptavidin bound biotin has a dissociation constant (Kd) on the order of about 10^−14 mol/L. Streptavidin and biotin are used extensively in molecular biology and bionanotechnology due to the resistance of streptavidin-biotin complex to organic solvents, denaturants (e.g. guanidinium chloride), detergents (e.g. SDS, Triton), proteolytic enzymes, and extremes of temperature and pH.
Synonyms:	rabbit anti-Streptavidin Antibody, rabbit anti Streptavidin
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Reactivity:	Streptavidin
Immunogen Type:	Native Protein
Immunogen:	Streptavidin (Streptomyces avidinii)
Purity/Specificity:	Anti-STREPTAVIDIN antibody was prepared from monospecific antiserum by a delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-rabbit serum, purified and partially purified Streptavidin. No cross reactivity occurs against Avidin.

Application Details

Tested Applications:	Dot Blot, ELISA, WB
Suggested Applications:	IF (Based on references)
Application Note:	Anti-Streptavidin Antibody has been tested by ELISA, western blot, and dot blot and is suitable for immunoprecipitation and most immunological methods requiring high titer and specificity.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000-1:100,000
IHC:	1:1,000-1:5,000
WB:	1:2,000-1:10,000

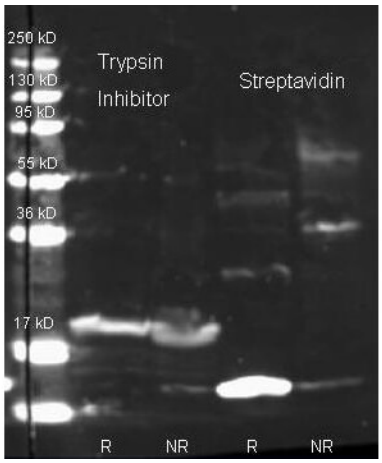
Formulation

Physical State:	Lyophilized
Concentration:	95 mg/mL by Refractometry
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None
Reconstitution Volume:	2.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

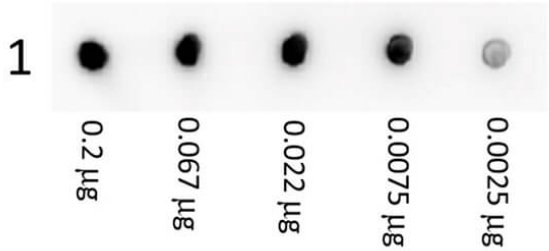
Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

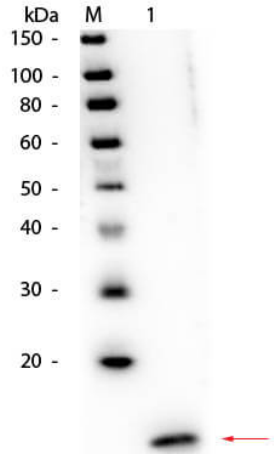
Images



Western Blot
Rockland Rabbit anti Streptavidin (200-4195 lot 23495) and Biotin conjugated Rabbit anti-trypsin inhibitor antibody (200 -4679 lot 6594) were used to detect target proteins Trypsin Inhibitor (left) and Streptavidin (right) under reducing (R) and non-reducing (NR) conditions. Reduced samples of purified target proteins contained 4% BME and were boiled for 5 minutes. Samples of ~1ug of protein per lane were run by SDS-PAGE. Protein was transferred to nitrocellulose and probed with 1:1000 dilution of primary antibody (ON 4 C). Detection shown was using Dylight 649 conjugated Donkey anti rabbit (611-743-127 lot 20831 1:10K 1.5 hr RT in MB-070) and imaged on the BioRad VersaDoc System



Dot Blot
Dot Blot showing the detection of Streptavidin. A three-fold serial dilution of DyLight™ 488 Conjugated Streptavidin starting at 200ng was spotted onto 0.45 µm nitrocellulose and blocked in 1% BSA-TTBS (p/n MB-013, diluted to 1X) 30 min at 20°C. Anti-Streptavidin (RABBIT) Antibody (p/n 100-4195) was incubated in Blocking Buffer for Fluorescent Western Blotting (p/n MB-070) at 1:1,000 for 1 Hour at 20°C. An HRP Gt-a-Rb secondary antibody (p/n 611-103-122) was incubated at 1:40,000 for 30 min at 20°C and imaged using the Bio-Rad VersaDoc® 4000 MP.



Western Blot
Western Blot of Rabbit anti-Streptavidin Antibody. Lane 1: Streptavidin. Load: 50 ng per lane. Primary antibody: Rabbit anti-Streptavidin Antibody at 1:1,000 overnight at 4°C. Secondary antibody: HRP rabbit secondary antibody (p/n 611-103-122) at 1:40,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 13.8 kDa, 13.8 kDa. Streptavidin exhibits a homotetramer structure with four essentially identical polypeptide chains. Pictured is reduced protein.

References

- Lapacz KJ et al. DPP8/9 processing of human AK2 unmasks an IAP binding motif. *EMBO Rep.* (2025)
- Liouta K et al. LRRTM2 controls presynapse nano-organization and AMPA receptor sub-positioning through Neurexin-binding interface. *Nat Commun.* (2024)
- Boyer CK et al. Synchronized proinsulin trafficking reveals delayed Golgi export accompanies β-cell secretory dysfunction in a rodent model of hyperglycemia. *bioRxiv Preprint* (2022)
- Fernández-Moreira V et al. Bioconjugated lanthanide luminescent helicates as multilabels for lab-on-a-chip detection of cancer biomarkers. *Analyst.* (2009)

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