

**Datasheet for S000-05****Streptavidin Alkaline Phosphatase Conjugated****Overview**

|                      |                                                        |
|----------------------|--------------------------------------------------------|
| <b>Description:</b>  | Streptavidin Alkaline Phosphatase Conjugated - S000-05 |
| <b>Item No.:</b>     | S000-05                                                |
| <b>Size:</b>         | 1 mg                                                   |
| <b>Applications:</b> | ELISA, WB, IHC                                         |

**Product Details**

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b> | Streptavidin is a bacterial protein (from <i>Streptomyces avidinii</i> ) that has an exceptionally high binding affinity for biotin (B7). Streptavidin-biotin binding is one of the strongest known non-covalent interactions and is highly resistant to many conditions that would typically cause dissociation (such as organic solvents, denaturants, detergents, and extreme temperatures or pH). Streptavidin's affinity for biotin can be employed in a variety of experimental uses, from purifications to standards, to means of detection or pull down experiments. Alkaline Phosphatase is an enzyme which removes phosphate groups from a variety of substrate molecules. As the name implies, this enzyme functions best under basic pH. Alkaline Phosphatase can be utilized in molecular biology in DNA ligation experiments (keeping the DNA linear), radiolabeling preparations, and a detection mediator in ELISA experiments. |
| <b>Synonyms:</b>   | SA alkaline phosphatase conjugate, S avidin conjugated to alkaline phosphatase, alkaline phosphatase conjugated to streptococcus avidin, streptavidin Alk Phos, SA-ALP, ALP conjugated streptavidin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Conjugate:</b>  | Alkaline Phosphatase (AP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

**Target Details**

|                            |                                                                                                                                                                                                                                                                                            |
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| <b>Purity/Specificity:</b> | Streptavidin-Alkaline Phosphatase was prepared from electrophoretically pure Streptavidin. Alkaline Phosphatase conjugated Streptavidin was assayed by immunoelectrophoresis resulted in a single precipitin arc against anti-Alkaline Phosphatase (calf intestine) and anti-Streptavidin. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P22629</a></li><li>• <a href="#">NCBI - CAA00084.1</a></li></ul>                                                                                                                                                           |

## Application Details

|                                |                                                                                                                                                                                                                                                                                                                           |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b>    | ELISA, WB                                                                                                                                                                                                                                                                                                                 |
| <b>Suggested Applications:</b> | IHC (Based on references)                                                                                                                                                                                                                                                                                                 |
| <b>Application Note:</b>       | Streptavidin Alkaline Phosphatase conjugated has been tested by dot blot and western blot and is a useful detection reagent for primary antibodies conjugated to biotin. Streptavidin Peroxidase can be utilized in both Western Blotting and ELISA experiment formats in combination with the proper substrate (NPP-10). |
| <b>Assay Dilutions:</b>        | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                           |
| <b>ELISA:</b>                  | 1:8,000 - 1:32,000                                                                                                                                                                                                                                                                                                        |
| <b>IHC:</b>                    | 1:200 - 1:1,000                                                                                                                                                                                                                                                                                                           |
| <b>WB:</b>                     | 1:1,000 - 1:4,000                                                                                                                                                                                                                                                                                                         |

## Formulation

|                        |                                                                                                                           |
|------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                                                                                 |
| <b>Concentration:</b>  | 1.0 mg/mL by UV absorbance at 280 nm                                                                                      |
| <b>Buffer:</b>         | 0.05 M Tris Chloride, 0.15M Sodium Chloride, 0.001M Magnesium Chloride, 0.0001M Zinc Chloride, 50% (v/v) Glycerol; pH 8.0 |
| <b>Preservative:</b>   | 0.05% (w/v) Sodium Azide                                                                                                  |
| <b>Stabilizer:</b>     | 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free                                                    |

## Shipping & Handling

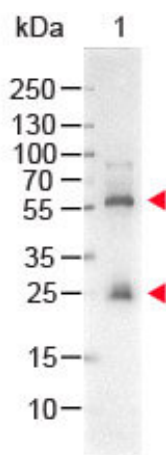
|                            |                                                                                                                                                                                                                                                                                |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shipping Condition:</b> | Wet Ice                                                                                                                                                                                                                                                                        |
| <b>Storage Condition:</b>  | Store vial at 4° C before opening. DO NOT FREEZE. Streptavidin Alkaline Phosphatase conjugated is stable at 4° C as an undiluted liquid. Dilute only prior to immediate use. Freezing alkaline phosphatase conjugates will result in a substantial loss of enzymatic activity. |
| <b>Expiration:</b>         | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                          |

## Images



### Bottle

Streptavidin Alkaline Phosphatase Conjugated



### Western Blot

Western Blot of STREPTAVIDIN ALKALINE PHOSPHATASE  
 Conjugated Lane 1: Biotin conjugated Guinea Pig IgG Load:  
 50 ng per lane Secondary antibody: STREPTAVIDIN ALKALINE  
 PHOSPHATASE Conjugated at 1:1,000 for 60 min at RT Block:  
 MB-070 for 30 min at RT Predicted/Observed Size: 28 and  
 55 kDa/28 and 55 kDa for Guinea Pig IgG.

## References

- Law ME et al. DR5 Disulfide Bonding Functions as a Sensor and Effector of Protein Folding Stress. *Mol Cancer Res.* (2025)
- Law, ME et al. Inhibitors of ERp44, PDIA1, and AGR2 induce disulfide-mediated oligomerization of Death Receptors 4 and 5 and cancer cell death. *Cancer Letters* (2022)
- Tham, M et al. Macrophage depletion reduces postsurgical tumor recurrence and metastatic growth in a spontaneous murine model of melanoma. *Oncotarget* (2015)
- Edwards KA, Baeumner AJ. Periplasmic binding protein-based detection of maltose using liposomes: a new class of biorecognition elements in competitive assays. *Anal Chem.* (2013)
- Kiening M et al. Microplate-based screening methods for the efficient development of sandwich immunoassays. *Analyst.* (2005)

## Disclaimer

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