

Datasheet for 000-001-GS5

Hemoglobin S Control Peptide

Overview

Description:	HbS Control Peptide - 000-001-GS5
Item No.:	000-001-GS5
Size:	50 µg

Product Details

Background:	HbS peptide corresponds to the E6V mutant in the hemoglobin beta subunit. Functional adult hemoglobin (Hb) is a hetero tetramer composed of 2 alpha and 2 beta subunits ($\alpha_2\beta_2$). Common isoform variants of hemoglobin include HbA, HbS, HbC, HbF, and HbA2. Hemoglobin S is the predominant hemoglobin in people with sickle cell disease. The alpha chain is normal. The disease-producing mutation exists in the beta chain, giving the molecule the structure, $\alpha_2\beta^S_2$. People who have one sickle mutant gene and one normal beta gene have sickle cell trait which is benign. Globin gene mutations affect the structure and expression levels of Hb. Sickle cell disease and the more benign sickle cell trait are observed in more than 100 million people globally. Perhaps the most significant mutation is the E6V in the beta subunit and the cause of SCD, but other relevant isoforms of Hb are observed. HbS peptide may be used as a control with Anti-HbS antibody. This peptide is ideal for investigators involved in Cardiovascular and developmental biology research.
Synonyms:	HbS Control Peptide, Hemoglobin beta subunit sickle mutant, HBS, HBBs, Sickle Cell Disease (SCD)
Type:	Peptide

Target Details

Purity/Specificity:	Greater than 95% specific peptide
Relevant Links:	000-001-GS5 SDS

Application Details

Application Note:	HbS peptide can be used as a control with the HbS antibody. Control peptide should be used at 1.0 µg per 1.0 µl of antiserum in per assay.
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Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/ml by dry weight
Buffer:	None
Preservative:	None
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20 °C prior to opening. Aliquot contents and freeze at -20 °C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature.
Expiration:	Expiration date is six (6) months from date of receipt.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.

