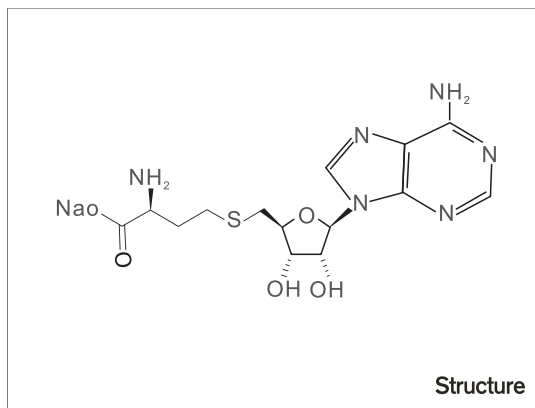


SAH-Na

Product name	SAH-Na
Catalog Number	AST00301-1
Chemical name	S-Adenosylhomocysteine sodium salt
Description	SAH-Na was synthesized by adding sodium to the carboxyl group of S-adenosylhomocysteine.

Properties

Form	Liquid
Molecular formula	$C_{14}H_{20}N_6O_5SNa$
Molecular Weight	406.39
Stability	Stable at room temperature for at least 1 month in PBS buffer.
Storage instructions	Refrigerate or freeze for long term storage
Storage buffer	PBS 10mM pH7.4 (NaCl 150mM), Proclin 0.1%, BSA 0.5%, Tween-20 0.1%
Purity	>98%
Usage	Used as a stable standard of S-adenosylhomocysteine in research laboratories.
Research Areas	Methylation of biomolecules (DNA, RNA, proteins, hormones, neurotransmitters, etc.) One-carbon metabolism Signal Transduction Metabolism Pathways and Processes Cancer Heart Disease Neurodegenerative diseases Atherosclerosis Kidney diseases



Applications

The use of AST00301 in the following tested applications has been tested.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
The product may be used in other not-yet-tested applications.

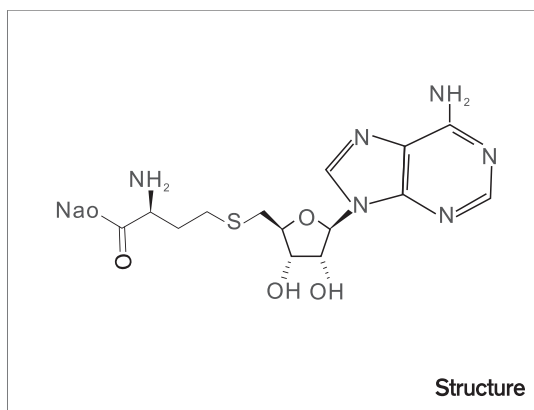
Application	Notes
cELISA	15 nM – 1000 nM (standard curve)
Rapid test strip (Colloidal gold)	300 nM (competitive inhibition of >80%)

SAH-Na s

Product name	SAH-Na s
Catalog Number	AST00301-1s
Chemical name	S-Adenosylhomocysteine sodium salt
Description	SAH-Na was synthesized by adding sodium to the carboxyl group of S-adenosylhomocysteine.

Properties

Form	Liquid
Molecular formula	$C_{14}H_{20}N_6O_5SNa$
Molecular Weight	406.39
Stability	Stable at room temperature for at least 1 month in PBS buffer.
Storage instructions	Refrigerate or freeze for long term storage
Storage buffer	Human plasma replacement recipe or mixed normal human inactivated plasma for in vitro immunoassay, 0.1% Proclin
Purity	>98%
Usage	Used as a stable standard of S-adenosylhomocysteine in research laboratories.
Research Areas	Methylation of biomolecules (DNA, RNA, proteins, hormones, neurotransmitters, etc.) One-carbon metabolism Signal Transduction Metabolism Pathways and Processes Cancer Heart Disease Neurodegenerative diseases Atherosclerosis Kidney diseases



Applications

The use of AST00301 in the following tested applications has been tested.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
The product may be used in other not-yet-tested applications.

Application	Notes
cELISA	15 nM – 1000 nM (standard curve)
Rapid test strip (Colloidal gold)	300 nM (competitive inhibition of >80%)

BSA-SAH

Product name	BSA-SAH
Catalog Number	ACT00301-50
Description	Bovine serum albumin (BSA) was conjugated to S-adenosylhomocysteine (SAH).

Properties

Form	Liquid
Storage instructions	Store at -20°C for long term storage
Storage buffer	PBS 10mM pH7.4 (NaCl 150mM), Sodium azide 0.02%
Purity	>98%
Usage	As a form of immobilized antigen in immunoassays of S-adenosylhomocysteine and others
Research Areas	Methylation of biomolecules (DNA, RNA, proteins, hormones, neurotransmitters, etc. One-carbon metabolism Signal Transduction Metabolism Pathways and Processes Cancers Arthritis Heart diseases Neurodegenerative diseases Atherosclerosis Liver diseases Kidney diseases

Applications

The use of ACT00301 in the following tested applications has been tested.

The application notes include recommended starting concentration; optimal dilutions/concentrations should be determined by the end user. The product may be used in other not-yet-tested applications.

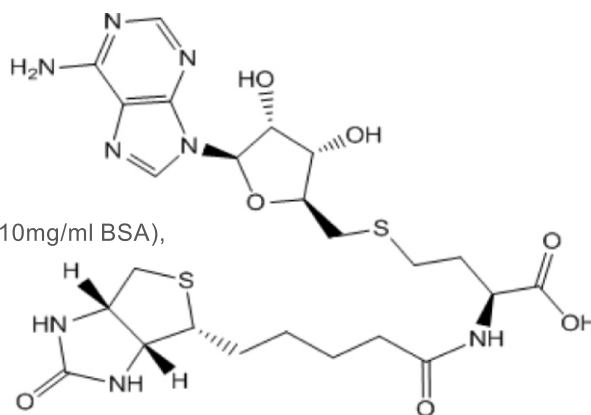
Application	Notes
cELISA	0.5 ug/ml
Rapid test strip (Colloidal gold)	0.3 ug/ml

Bio-SAH a/b

Product name	Bio-SAH a/b
Catalog Number	ACT00302-50/100
Description	Biotin is conjugated to the NH ₂ group of S-adenosylhomocysteine.

Properties

Form	Liquid
Molecular formula	C ₂₄ H ₃₄ N ₈ O ₇ S ₂
Molecular Weight	610.71
Structure	
Storage instructions	Store at -20°C
Storage buffer	PB 20mM pH 7.4 (with or without 10mg/ml BSA), Proclin 0.1%
Concentration	2 mg/ml
Purity	100% (HPLC)

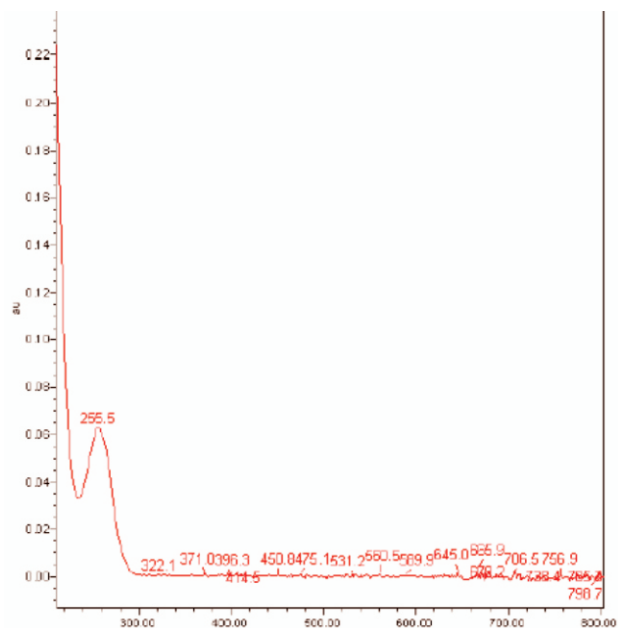


Verification

The ninhydrin colorimetry and thin layer chromatography methods were used to show reactions were complete and the conjugated product has the SAH component. Thorough purification was performed to ensure removal of any non-conjugated materials. Ultraviolet absorption spectrum of the conjugated product showed a peak at 255.5nm. SAH UV absorption spectrum does not show any peak.

Applications

The use of ACT00302-50/100 in the following application has been tested. Optimal concentrations should be determined by the end user. The product may be used in other not-yet-tested applications.

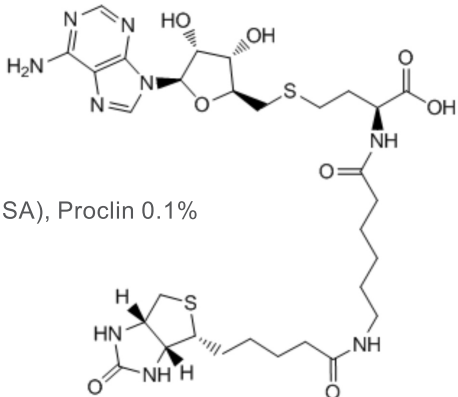


Application	Notes
Competitive ELISA	No difference between Biotin-conjugated and unconjugated SAH molecules in their capabilities to competitively bind anti-SAH antibody.

Bio-6C-SAH 1a/b

Product name	Bio-6C-SAH 1a/b
Catalog Number	ACT00303-50/100
Description	Biotin-conjugated S-adenosylhomocysteine: Biotin is conjugated to an NH ₂ of SAH through 6-aminohexanoic acid.

Properties

Form	Liquid
Molecular formula	C ₃₀ H ₄₅ N ₉ O ₈ S ₂
Molecular Weight	723.86
Structure	
Storage instructions	Store at -20°C
Storage buffer	PB 20mM pH 7.4 (with or without 10mg/ml BSA), Proclin 0.1%
Concentration	2 mg/ml
Purity	100% (HPLC)

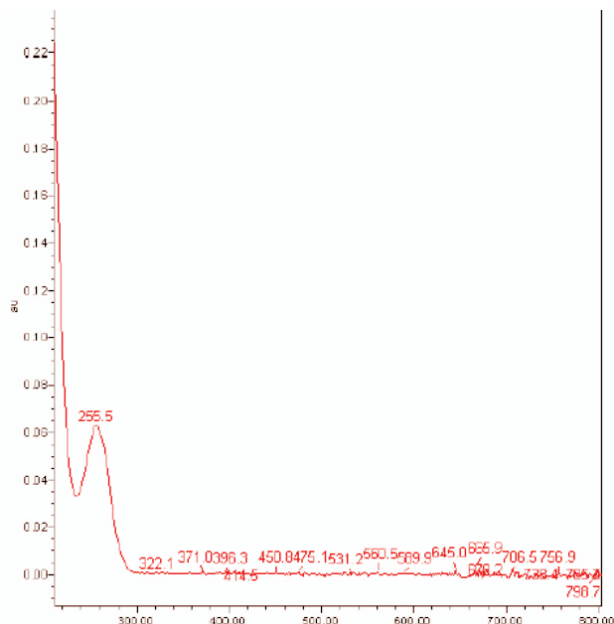
Verification

The ninhydrin colorimetry and thin layer chromatography methods were used to show reactions were complete and the conjugated product has the SAH component. Thorough purification was performed in each step to ensure removal of any non-conjugated materials. Ultraviolet absorption spectrum of the conjugated product showed a peak at 255.5nm. SAH UV absorption spectrum does not show any peak.

Applications

The use of ACT00303-50/100 in the following application has been tested. Optimal concentrations should be determined by the end user. The product may be used in other not-yet-tested applications.

Application	Notes
Competitive ELISA	No difference between Biotin-conjugated and unconjugated SAH molecules in their capabilities to competitively bind anti-SAH antibody.

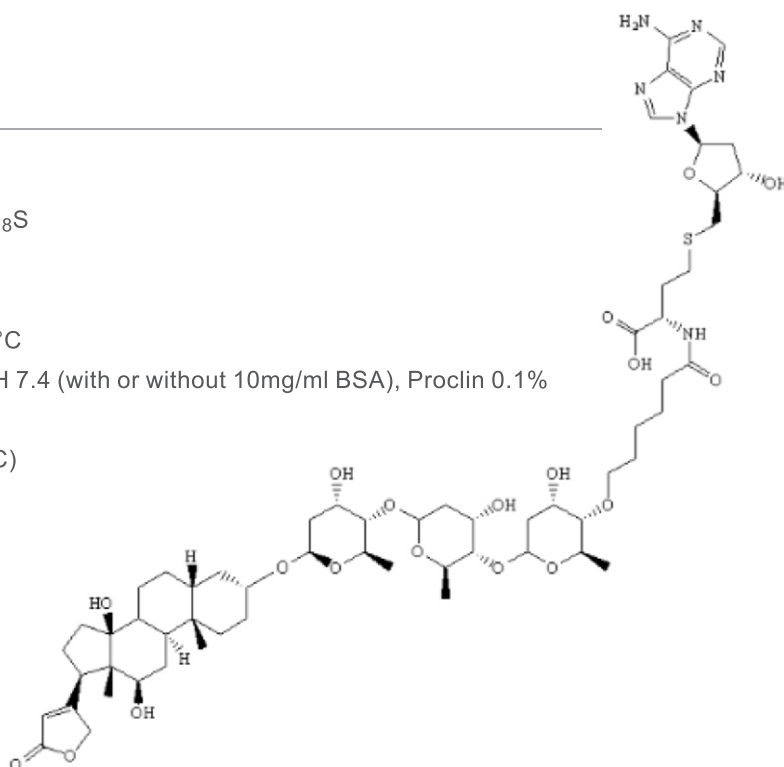


Dig-6C-SAH 1a/b/c

Product name	Dig-6C-SAH 1 a/b/c
Catalog Number	ACT00304-25/50/100
Description	Digoxin-conjugated S-adenosylhomocysteine: Digoxin is conjugated to NH ₂ of SAH through 6-bromocaproic acid.

Properties

Form	Liquid
Molecular formula	C ₆₁ H ₉₂ N ₆ O ₁₈ S
Molecular Weight	1229.48
Structure	
Storage instructions	Store at -20°C
Storage buffer	PB 20mM pH 7.4 (with or without 10mg/ml BSA), Proclin 0.1%
Concentration	2.33 mg/ml
Purity	100% (HPLC)



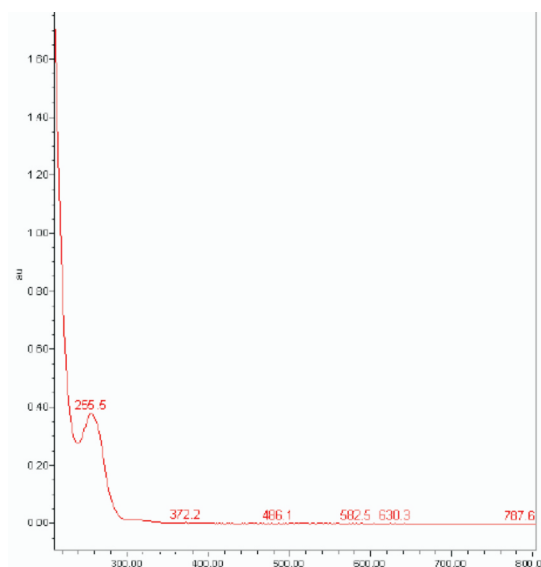
Verification

The ninhydrin colorimetry and thin layer chromatography methods were used to show reactions were complete and the conjugated product has the SAH component. Thorough purification was performed in each step to ensure removal of any non-conjugated materials. Ultraviolet absorption spectrum of the conjugated product showed a peak at 255.5nm. SAH UV absorption spectrum does not show any peak.

Applications

The use of ACT00304-50/100 in the following application has been tested. Optimal concentrations should be determined by the end user. The product may be used in other not-yet-tested applications.

Application	Notes
Competitive ELISA	No difference between Digoxin-conjugated and unconjugated SAH molecules in their capabilities to competitively bind anti-SAH antibody.

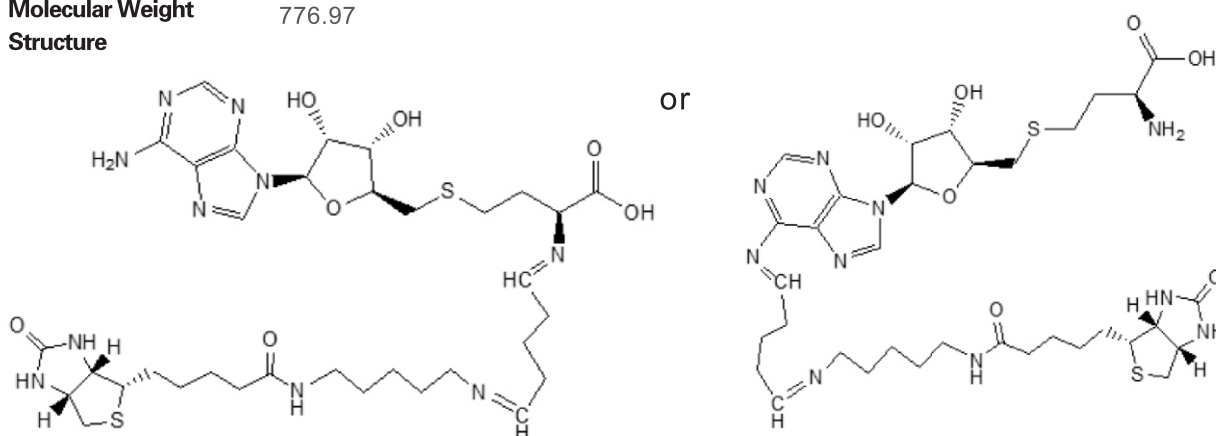


Bio-12CN-SAH 1a/b/c

Product name	Bio-12CN-SAH 1a/b/c
Catalog Number	ACT00305-10/50/100
Description	Biotin is conjugated with S-adenosylhomocysteine through a 10-carbon and 2-nitrogen linker.

Properties

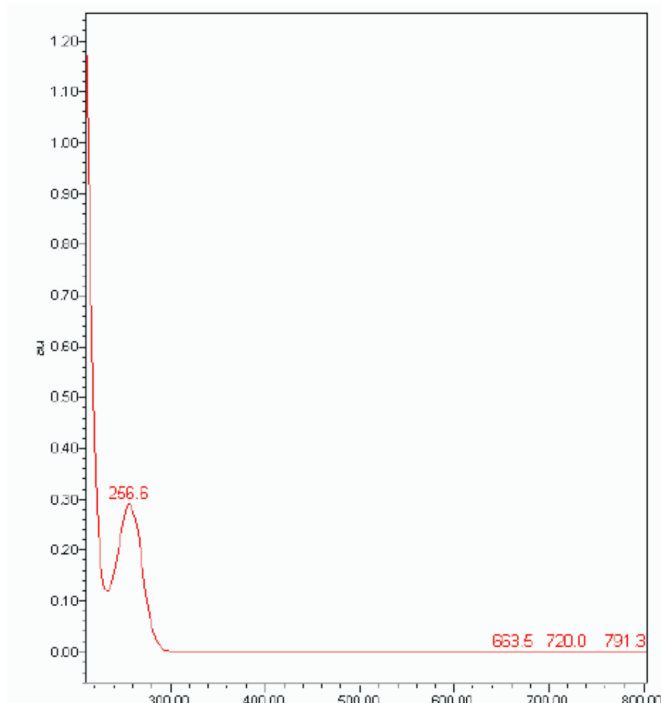
Form	Liquid
Molecular formula	C ₃₄ H ₅₂ N ₁₀ O ₇ S ₂
Molecular Weight	776.97
Structure	



Storage instructions	Store at -20°C
Storage buffer	PB 20mM pH 7.4 , Proclin 0.1%
Concentration	0.4 mg/ml or 0.5 mg/ml
Purity	100% (HPLC)

Verification

The ninhydrin colorimetry and thin layer chromatography methods were used to show reactions were complete and the conjugated products have the SAH component. Thorough purification was performed in each step to ensure removal of any non-conjugated materials. Ultraviolet absorption spectrum of the conjugated product showed a peak at 256.6nm. SAH UV absorption spectrum does not show any peak.



Applications

The use of ACT00305-10/50/100 in the following application has been tested. Optimal concentrations should be determined by the end user. The product may be used in other not-yet-tested applications.

Application	Notes
Competitive ELISA (Plates coated with BSA-SAH, SA, Mouse-anti-SAH antibody respectively)	No difference between Biotin-conjugated and unconjugated SAH molecules in their capabilities to competitively bind anti-SAH antibody.

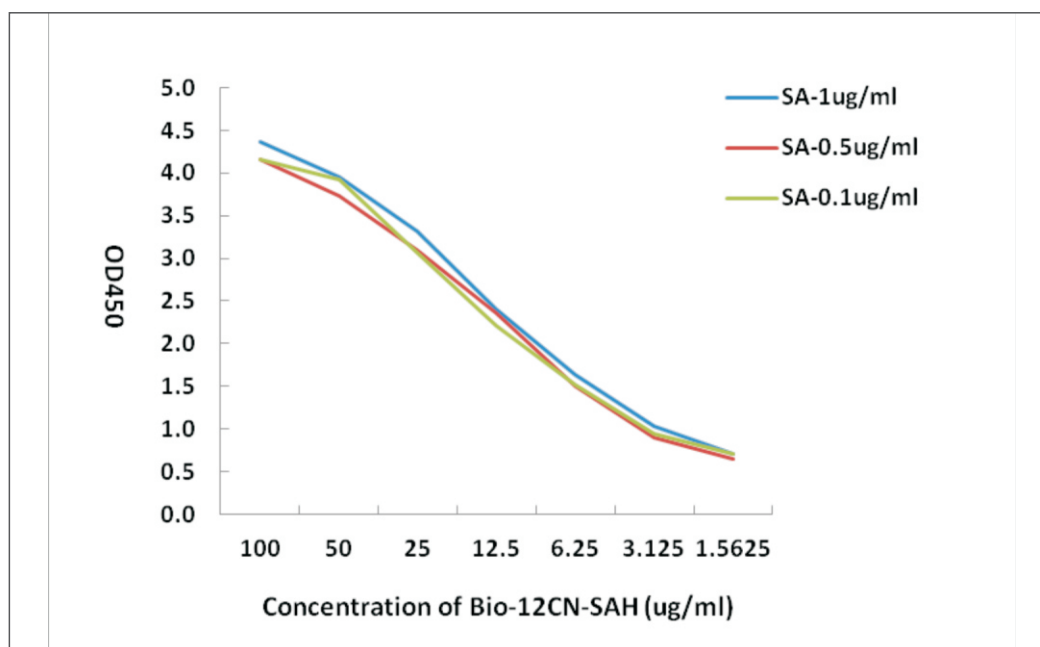


Figure 1 Streptavidin was coated on micro-plate, followed by Bio-12CN-SAH. HRP-anti-SAH antibody was then added and OD450 was read.