

## Instructions for Use

### Collagen SRP™ Catalog No. 107328

#### **FOR RESEARCH USE ONLY**

#### Product Description






Collagen SRP is a synthetic, liquid polypeptide polymer of PHG (PolyPHG, Tripeptide Proline Hydroxyproline Glycine), a Type 1, fibrillar collagen polypeptide. Collagen SRP specifically reacts with Glycoprotein V1 (GPV1). GPV1 is a 62-k Da type 1 transmembrane glycoprotein that is expressed on platelets and mature megakaryocytes.

Collagen SRP is for professional laboratory use.

#### Principle:

Collagen SRP is a synthetic polymer polypeptide reagent that self assembles into the triple helix of Type I fibrillar collagen. Collagen SRP is a potent inducer of platelet activation and aggregation.


#### Precautions

-  COLLAGEN SRP is for **RESEARCH USE ONLY** and **NOT FOR USE** in diagnostic tests, assays or procedures. Collagen SRP is not for injection, ingestion or cosmetic use.
-  COLLAGEN SRP does not contain any bacterial, animal or human source material.
-  COLLAGEN SRP conforms to the requirements of MEDDEV.2.14/2, rev 1. Every precaution has been taken to protect the health and safety of the user and other persons.
-  Do **not** use tubes or vials other than those included in this kit. Erroneous results may occur.
-  Do **not** use Parafilm® to seal or mix vials. Erroneous results may occur.

#### Materials Provided

1. Collagen SRP, 0.0002 mg/mL (0.2µg/mL), 1 x 1mL
2. Collagen SRP, 0.00005 mg/mL (0.05µg/mL), 1 x 1mL
3. Collagen SRP Diluent, 2 x 5mL
4. Four polypropylene vials with stoppers for preparing additional dilutions

#### Reagent Storage






-  Collagen SRP is stable for 1 year when stored at 2° to 8°C. Collagen SRP must be stored at 2° to 8°C when not in use. Do not freeze Collagen SRP. Do not expose Collagen SRP to temperatures ≥ 25°C except for the 2 minutes of instrument incubation and the test procedures.

#### Concentrations

Two concentrations of Collagen SRP are provided:

1. Collagen SRP, 0.00005mg/mL (0.05 µg/mL) is the initial recommended concentration.
2. Collagen SRP, 0.0002mg/mL (0.2 µg/mL) is provided for dilution studies other than 0.00005mg/mL (0.05 µg/mL). Refer to Reagent Preparation Table 1 for various working concentrations. Prepare desired working concentrations with the Collagen SRP diluents provided.

#### Test Procedure for Platelet Aggregation

-  Testing must be completed within 4 hours of specimen collection.
-  Testing must be performed per the instrument manufacturer's directions and your laboratory policies and procedures.
-  Stored Collagen SRP must be brought to room temperature prior to use.
-  Do **not** vortex
-  Mix diluted Collagen SRP thoroughly by inverting four times prior to use.

Instructions for PAP 8E or other LTA Systems requiring 0.25mL total test volume:

1. Place a stir bar into each test tube.
2. Prepare an aggregometer blank by pipetting 0.25mL, platelet poor plasma into a test tube.
3. Pipette 0.225mL platelet rich plasma into a second test tube. Incubate at 37° for 2 minutes.
4. Set, if required, the 0% and 100% baselines according to the manufacturer's instructions for the aggregometer in use.
5. Mix Collagen SRP thoroughly by inversion. Do **not** vortex. Add 0.025mL Collagen SRP directly into the platelet rich plasma. Do not allow reagent to run down the wall of the test tube. Refer to dilution chart for appropriate concentration.
6. Allow the aggregation pattern to generate for 6 minutes.

If total test volume on your LTA System differs, volumes must be adjusted appropriately.

Instructions for LTA systems requiring 0.5 mL total test volume:

1. Place a stir bar into each test tube.
2. Prepare an aggregometer blank by pipetting 0.5mL, platelet poor plasma into a test tube.
3. Pipette 0.45mL platelet rich plasma into a second test tube. Incubate at 37° for 2 minutes.
4. Set, if required, the 0% and 100% baselines according to the manufacturer's instructions for the aggregometer in use.
5. Mix **Collagen SRP** thoroughly by inversion. Do **not** vortex. Add 0.05mL **Collagen SRP** directly into the platelet rich plasma. Do not allow reagent to run down the wall of the test tube. Refer to dilution chart for appropriate concentration.
6. Allow the aggregation pattern to generate for 6 minutes.

For platelet aggregation studies, **Collagen SRP** may be used straight from the vial, or may be diluted. Always mix **Collagen SRP** thoroughly by inverting four times prior to use or preparing dilutions. Follow the table below to prepare dilutions. Use only the diluent and empty vials provided in the kit. See Table 1.

Prepare working concentrations with the **Collagen SRP** Diluent provided in the kit

**Table 1: Reagent Preparation Table for Platelet Aggregation**

0.00005 Collagen SRP	Starting	Working Concentration		0.0002 Collagen SRP	Starting	Working Concentration
Collagen SRP µL	Diluent µL	(mg/ mL)		Collagen SRP µL	Diluent µL	(mg/ mL)
100	900	0.000005		100	900	0.00002
200	800	0.000010		200	800	0.00004
300	700	0.000015		300	700	0.00006
400	600	0.000020		400	600	0.00008
500	500	0.000025		500	500	0.00010
600	400	0.000030		600	400	0.00012
700	300	0.000035		700	300	0.00014
800	200	0.000040		800	200	0.00016
900	100	0.000045		900	100	0.00018

**Performance Characteristics**

Performance characteristics have not been established for **Collagen SRP**.

**Results**

Typical results and reference ranges for **Collagen SRP** have not been established for any application. Each laboratory must establish its own criteria for test acceptability. Observed results are based on very limited data and may not be representative or reproducible. See Table 2.

**Table 2: Platelet Aggregation Responses at Various Concentrations (as observed on limited sample types in Bio/Data Corporation laboratories):**

Collagen SRP Concentration (mg/mL)	0.5000	0.0500	0.0050	0.0005	0.000250	0.000050	0.000025	0.000005	0.0000025
Slope	58	51	54	58	57	57	50	28	53
Aggregation	80	76	83	86	82	81	77	81	82
Lag Phase	0.1	0.1	0.1	0.1	0.1	0.1	3.5	32	16.5

**Limitations**

Platelet aggregation measures the rate or activity of platelet response in the presence of a stimulant or agonist. It is not a quantitative measure of reactants or concentrations.

**Quality Control**

Laboratories should follow generally accepted quality control practices.

**Research Use Only (RUO) Products from Bio/Data Corporation**

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Use of RUO products shall be limited to qualified and properly trained laboratory professionals.

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Customers represent and warrant that, through their own data, review and study that the laboratory staff is aware of and trained in the following:

- Regulations regarding the use of and exposure to Research Use Only Products.
- Laboratory policies and practices that mitigate hazards and risks associated with the handling and use of RUO products.
- Obligations to warn laboratory staff about the risks and hazards associated with RUO product use; train staff in the proper use of the RUO product and its limitations.