



## Pan-Specific C3 Reagent Kit

### Frequently Asked Questions

For **Research Use Only**. Not for use in diagnostic procedures.

#### **General**

##### **Is the kit a standalone product?**

No. To get a result with the Pan-Specific C3 (PS-C3) product, you must run the end dilution with the MicroVue SC5b-9 Plus EIA, Cat. #A020 or A029 (CE kit).

##### **How many samples can be processed by the kit?**

There are enough reagents in the kit to complete 40 sample conversions. The SC5b-9 Plus kit has 96 determinations. Sixteen (16) of those determinations are used for the standard curve and kit controls, leaving 80 determinations for samples. The specimens are run in duplicate; therefore, results for 40 animal specimens can be generated. The kits should be purchased one for one.

##### **How to calculate percent consumption?**

Summary: Use a sample from the animal and run directly in the SC5b-9 Plus kit without processing with the PS-C3 kit reagents to generate a pre-conversion result. Then run in the PS-C3 kit for conversion and into the SC5b-9 Plus kit. Dose the animal with the drug to test at various levels and run directly in the SC5b-9 Plus kit and again convert the sample by using the PS-C3 kit and re-run through the SC5b-9 Plus kit. Using these numbers calculate percentage C3 consumption as seen in Table 1.

$$\text{Baseline Postconversion} - \text{Baseline Preconversion} = X$$

$$\text{Drug Treatment Postconversion} - \text{Drug Treatment Preconversion} = Y$$

C3 Consumption % =

$$\frac{X-Y}{X} * 100$$

**Table 1: C3 Consumption in Dog Blood Caused by Reactogenic Anticancer Drugs**

| Drug        | Dose                  | Dog | Baseline      |                | Drug Treatment |                | C3 Consumption (%) |
|-------------|-----------------------|-----|---------------|----------------|----------------|----------------|--------------------|
|             |                       |     | Preconversion | Postconversion | Preconversion  | Postconversion |                    |
| Vincristin  | 0.5 mg/m <sup>2</sup> | 1   | 5             | 79             | 3              | 35             | 57                 |
| Carboplatin | 250 mg/m <sup>2</sup> | 2   | 5             | 52             | 3              | 24             | 56                 |
| Vincristin  | 0.5 mg/kg             | 3   | 5             | 124            | 3              | 98             | 20                 |

**If I am using the Pan-Specific C3 Reagent Kit in conjunction with the MicroVue SC5b-9 Plus EIA, how do I determine the appropriate dilution factor to calculate the true SC5b-9 concentration in each sample?**

You will first need to determine the dilution factor for the sample and all reagents used in the Pan-Specific C3 conversion, including the addition of the Stop Solution. Since the total volume of the reaction mixture including the original sample is 160 µL and the volume of sample used is 20 µL, the dilution factor for this portion of the assay is 8. Next, you will need to dilute the sample as indicated in the Pan-Specific C3 Package Insert, depending on whether you are using serum or plasma samples. If serum samples are being used, the 1:8 mixture will be further diluted by a factor of 2.5, making the total dilution factor for serum thus far a total of 20. For plasma samples, the 1:8 mixture will be further diluted by a factor of 10, which gives a total dilution thus far of 80. At this point, samples will need to be diluted according to the MicroVue SC5b-9 Plus Package Insert. The dilutions at this step are, again, dependent on whether the samples are serum or plasma. The serum samples that are already at a dilution of 1:20 should be diluted again by a factor of 40, which gives a final dilution of 1:800. Plasma samples that are already at a dilution of 1:80 should be diluted again by a factor of 10, which also gives a final dilution of 1:800. Please see Table 2 below for a breakdown of the total sample dilution at various steps:

**Table 2: Determination of Sample Dilution**

| Sample Type | Total Dilution of Pan-Specific C3 Assay Reaction Mixture | Post-Pan-Specific C3 Conversion Reaction Dilution | Beginning Dilution for SC5b-9 Assay Protocol | Final Dilution |
|-------------|--|---|--|----------------|
| Serum       | 1:8  | 1:2.5   | 1:40   | 1:800*         |
| Plasma      | 1:8  | 1:10  | 1:10   | 1:800*         |

\*Note: This final dilution factor is solely based on the dilution factors listed in the appropriate Package Inserts. Any deviation from the given dilution factors must be accounted for, and will change the final dilution factor.

The dilution factor at the end of the Pan-Specific C3 conversion or at the beginning of the SC5b-9 ELISA can be adjusted if samples are not falling within the detectable range of the SC5b-9 standard curve. You will need to make sure to appropriately account for any adjustments.

The performance of any test is dependent on sample collection and handling and the adherence to the Package Insert.

Refer to the Package Insert on our website at [quidel.com](http://quidel.com) for additional performance claims.

\*For state by state fee schedule go to [www.cms.gov](http://www.cms.gov).

\*\* This information is being provided as a reference, for informational purposes only, with no expressed or implied warranty and does not purport to provide legal or certified coding advice. **Under Federal and State law, it is the individual provider's responsibility to determine appropriate coding, charges and claims for a particular service.** Policies regarding appropriate coding and payment levels can vary greatly from payer to payer and change over time. Quidel Corporation strongly recommends that providers contact their contracted payers to determine appropriate coding and charge or payment levels prior to submitting claims.