

Obtaining **UPC** Results on the IDEXX **Catalyst One*** Chemistry Analyzer

The Catalyst* Urine P:C Ratio allows you to quantify urinary protein loss. It can detect very low levels of protein in canine and feline urine samples. By also measuring urine creatinine levels and forming a urine protein to creatinine (UPC) ratio, the Catalyst Urine P:C Ratio measures urinary protein loss, while automatically correcting for variations in urine volume and concentration.

IMPORTANT: When initiating the run on the IDEXX VetLab* Station, don't forget to select **Run UPC** on the Select Instruments screen. **Do not change the default automated dilution value (1:20).**

Loading UPC Materials in the Catalyst One* Chemistry Analyzer

When prompted, do the following:

1. Load pipette tips.
2. Load the undiluted sample.

Note: Always centrifuge the urine sample to obtain supernatant urine for the UPC run.

3. Load both the UPRO and UCRE slides.

Note: Do not run any other slides or CLIPs with the UPC panel.

4. Load an empty sample cup in the left dilution cup holder.
5. Load a sample cup containing 300 μ L of Catalyst* Urine P:C Diluent in the right dilution cup holder.



Interpret the UPC Results

In instances where UPRO or UCRE report outside of the reportable range, the UPC ratio will be reported based on the medical significance of proteinuria present in your patient. When the UPC ratio is reported, a second run is not necessary.

If your UPRO and UCRE results are greater than the reportable range

In the rare instance that your UPRO and UCRE results are greater than the reportable range, it is recommended that you perform a manual 1:2 dilution and analyze the sample using the following steps:

1. Accurately measure one part undiluted urine (e.g., 100 μ L) and transfer it to a Catalyst* sample cup.
2. Accurately measure one part diluent (use the same volume as used for urine in step 1) and add it to the sample cup used in step 1.
3. Thoroughly mix the sample and diluent by aspirating and redispensing the combination into the sample cup approximately 4–5 times.
4. Run a new UPC test on the Catalyst One analyzer. It is essential that you:
 - Select **Run UPC** from the Select Instruments screen.
 - Leave the default automated dilution value (1:20) unchanged.
 - Load the dilution materials, the sample you prepared in steps 1–3, and the UPC slides, when prompted.
 - Do not run any other slides or CLIPs with the UPC test.
5. Review your results. The reported UPC ratio will be accurate with the 1:2 dilution. The UPRO and UCRE values reported separately will not represent the actual concentrations in the urine at this time. These concentrations can be determined by multiplying the reported results by the dilution factor ($\times 2$ for the 1:2 dilution).