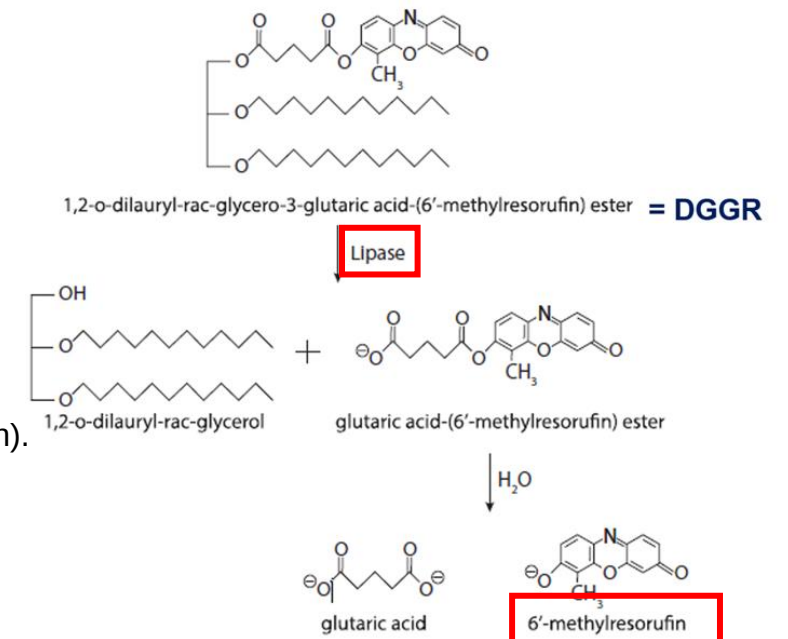


PLI Testing

- **IDEXX Spec cPL:** monoclonal antibody-based sandwich ELISA method
 - ➔ Measures the **concentration** of pancreas-specific lipase
- **Vcheck cPL/fPL:** fluorescent immunoassay
 - ➔ Measures the **concentration** of pancreas-specific lipase
- **IDEXX Catalyst Pancreatic Lipase Test:** colorimetric reaction method using DGGR substrate
 - ➔ Measures the **activity** of pancreatic lipase in the blood

< DGGR Lipase >

- 1) DGGR is hydrolyzed by pancreatic lipase in the blood.
- 2) This process generates a colored product, methylresorufin.
- 3) The photometer in the Catalyst analyzer measures the intensity of the color (Photometric Detection).
- 4) The measured color intensity is proportional to the concentration of pancreatic lipase.



Limitations of the DGGR lipase assay

- **Specificity Concerns:** DGGR can be hydrolyzed not only by pancreatic-specific lipase **but also by lipases secreted from other organs**, leading to a higher possibility of false-positive results.
 - ***Extra-pancreatic lipases:** These lipases, such as lipoprotein lipase, hepatic lipase, gastric lipase, and PLRP2, can increase DGGR lipase activity.
- **Variability in Results:** When compared to IDEXX Spec cPL/fPL, which are considered the gold standard tests for canine and feline pancreatic lipase, **discrepancies have been observed with IDEXX Catalyst results, especially at moderate to high concentrations.**

