Tel: 408-733-1055; Fax: 408-733-1304 www.aatbio.com; E-Mail: info@aatbio.com

## **Product Information Sheet**

## **Ordering Information**

Product Number: 14021

Product Name: Resorufin alpha-D-galactopyranoside

Unit Size: 5 mg

Storage Conditions: <-15 °C and kept from light and moisture

Expiration Date: 12 months upon receiving

## **Chemical and Spectral Properties**

Molecular Weight: 375.33

Chemical Structure:

Soluble in: DMSO
Excitation Wavelength: 571 nm
Emission Wavelength: 585 nm

## **Application Notes**

Resorufin alpha-D-galactopyranoside is a sensitive fluorogenic substrate that generates a red fluorescent product (resorufin) upon interaction with alpha-galactosidase. It is used for measuring alpha-galactosidase activities and high throughput screening of alpha-galactosidase inhibitors. Alpha-galactosidase is a glycoside hydrolase enzyme that hydrolyses the terminal alpha-galactosyl moieties from glycolipids and glycoproteins. This enzyme is a homodimeric glycoprotein that hydrolyses the terminal alpha-galactosyl moieties from glycolipids and glycoproteins. It predominantly hydrolyzes ceramide trihexoside, and it can catalyze the hydrolysis of melibiose into galactose and glucose. A variety of mutations in this gene affect the synthesis, processing, and stability of this enzyme, which causes Fabry's disease, a rare lysosomal storage disorder and sphingolipidosis that results from a failure to catabolize alpha-D-galactosyl glycolipid moieties.