

Chromogenic substrate for serum paraoxonase (PONs) activity

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Summary

315 - TBBL (5-thiobutyl butyrolactone) Description: TBBL (5-thiobutyl butyrolactone) is a chromogenic lipolactone substrate for Serum paraoxonases (PONs), used for sera tests of PONs activity, based on their lactonase activity. The primary enzymatic reaction produces an unstable intermediate that rapidly collapses to release a fluorescent/chromogenic moiety. Can be used with a variety of biological samples, for example, serum, cells or cell lysates and suitable for high-throughput screens. Serum paraoxonase (PON1) is a high-density lipoprotein(HDL)-associated enzyme with antiatherogenic and detoxification properties that hydrolyzes a wide range of substrates and exhibits a wide range of physiologically important activities, including cholesterol efflux, drug metabolism and the detoxification of Ops (organophosphates).

Reference: Khersonsky O, [Tawfik DS](#) [1]. 2006. Chromogenic and fluorogenic assays for the lactonase activity of serum paraoxonases. *Chembiochem.* 7(1):49-53.