Creative Enzymes®

# Recombinant Human Acyloxyacyl hydrolase

*Cat. No. EXWM-3505*

*Lot. No.* (See product label)

## Introduction

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| ***Description*** | The substrate is lipid A on the reducing end of the toxic lipopolysaccharide (LPS) of Salmonella typhimurium and related organisms. It consists of diglucosamine, β-D-GlcN-(1→ 6)-D-GlcN, attached by glycosylation on O-6 of its non-reducing residue, phosphorylated on O-4 of this residue and on O-1 of its potentially reducing residue. Both residues carry 3-(acyloxy)acyl groups on N-2 and O-3. The enzyme from human leucocytes detoxifies the lipid by hydrolysing the secondary acyl groups from O-3 of the 3-hydroxyacyl groups on the disaccharide (LPS). It also possesses a wide range of phospholipase and acyltransferase activities [e.g. EC 3.1.1.4 (phospholipase A2), EC 3.1.1.5 (lysophospholipase), EC 3.1.1.32 (phospholipase A1) and EC 3.1.1.52 (phosphatidylinositol deacylase)], hydrolysing diacylglycerol and phosphatidyl compounds, but not triacylglycerols. It has a preference for saturated C12-C16 acyl groups. |

## Product Information

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| ***Species*** | Human |
| ***Source*** | E.coli |
| ***Form*** | Liquid or Lyophilized powder |
| ***EC Number*** | EC 3.1.1.77 |
| ***CAS No.*** | 110277-64-0 |
| ***Molecular Weight*** | 62.4 kDa |
| ***Purity*** | Greater than 90% as determined by SDS-PAGE. |
| ***Activity*** | Not detected |
| ***Buffer*** | If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose, pH 8.0. |
| ***Reaction*** | 3-(acyloxy)acyl group of bacterial toxin + H2O = 3-hydroxyacyl group of bacterial toxin + a fatty acid |
| ***Notes*** | This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications. |

## Storage and Shipping Information

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| ***Storage*** | Store at -20°C/-80°C upon receipt, aliquoting is necessary for mutiple use. Avoid repeated freeze-thaw cycles. |