

## PROTEIN DATASHEET

PROTEIN NUMBER	PROTEIN NAME	EXPRESSION HOST
2016-1280	LDH-Pv (Purified recombinant <i>P. vivax</i> LDH)	<i>Escherichia coli</i>

### GENERAL INFORMATION

Construct Design	: LDH-Pv (2-316) was expressed with a polyhistidine-tag followed by a Human Rhinovirus 3C protease cleavage site at the N-terminus. Full length: 334 amino acids Primary sequence length: 315 amino acids (1Thr- 315Ile*)
Theoretical Molecular Mass	: 36.2 kDa
Theoretical pI	: 6.83
Cell Strain	: <i>Rosetta (DE3) pLysS</i>
Protein Description	: The Lactate dehydrogenase protein (LDH) is critical for the conversion of lactate to pyruvate in anaerobic glycolysis pathway to generate ATP for the malarial parasite to survive in the human host. Structural and sequence identity of LDH from <i>Plasmodium vivax</i> is highly similar to LDH from <i>Plasmodium falciparum</i> with only minor conformational differences identified in their co-factor binding site.
Application	: Wide range of assays such as enzymatic assay, immunoassay, protein-protein interaction assay. Note: optimal working dilution should be determined by the user.
Restriction	: This product is for research use only. It is not intended for use in humans.

### FORMULATION AND STORAGE

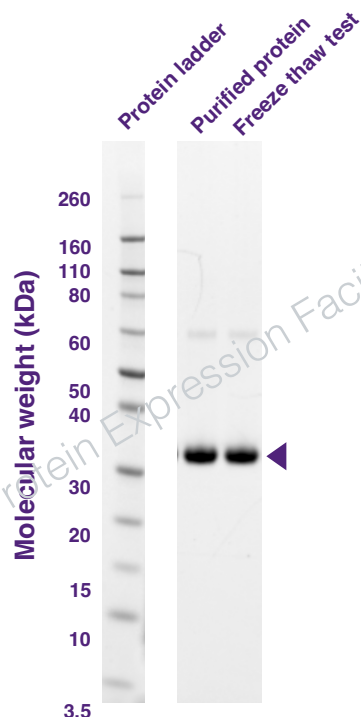
Form	: Liquid
Purity	: > 99 % as determined by SDS-PAGE
Protein Concentration	: 2.13 mg/mL (Lot specific)
Storage Buffer	: Phosphate Buffer Saline + 5% Glycerol
Storage Condition	: For longer term storage aliquot in small volumes and store at -80°C. Repeated freeze-thaw cycles not recommended.
Shipping Condition	: Shipped on dry ice. Stored at -80°C upon receipt.

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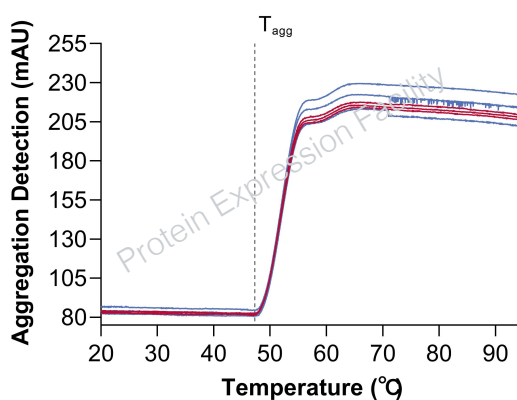
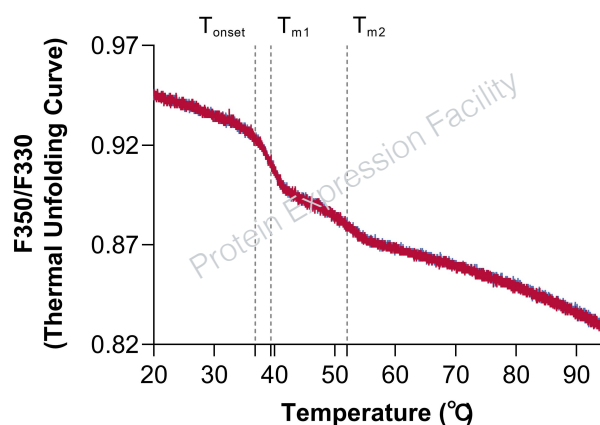
**COMPREHENSIVE QUALITY CONTROL**

Protein Purity	:	Determined by SDS-PAGE
Protein Stability	:	Freeze-thaw stability by SDS-PAGE Protein unfolding and aggregation onset temperature determined by differential scanning fluorimetry

## QUALITY CONTROL DATA



**SDS PAGE Analysis  
(Denatured and reduced)**



— 4°C  
— Freeze-thaw  
 $T_{onset}$  – Onset of melting temperature (°C)  
 $T_{m1}$  – First melting temperature (°C)  
 $T_{m2}$  – Second melting temperature (°C)  
 $T_{agg}$  – Aggregation temperature (°C)

## Nano Differential Scanning Fluorimetry Analysis

Recipients using LDH-Pv from Protein Expression Facility must acknowledge the facility's contribution in written publications and/or oral presentations.