ADAZYME™-LS	**Enzymatic Assay For ADA Determination**
Application	For the Determination of Adenosine Deaminase Activity in Serum, Plasma and Biological Fluids by Enzymatic Method
Principle	The ADA assay is based on the enzymatic deamination of adenosine to inosine which is converted to hypoxanthine by purine nucleoside phosphorylase (PNP). Hypoxanthine is then converted to uric acid and hydrogen peroxide (H O) by xanthine 2 2 oxidase (XOD). H O is further reacted with N-Ethyl-N-(2-hydroxy-3-sulfopropyl)-3-methylaniline (EHSPT) and 4- 2 2 amino antipyrine (4-AA) in the presence of peroxidase (POD) to generate a Quinone dye which is monitored in a kinetic manner
Specificity	$\text{Adenosine} + H_2O \xrightarrow{ADA} \text{Inosine} + NH_3$ $\text{Inosine} + Pi \xrightarrow{PNP} \text{Hypoxanthine} + \text{Ribose-1-phosphate}$ $\text{Hypoxanthine} + H_2O + O_2 \xrightarrow{XOD} \text{Uric acid} + H_2O_2$ $H_2O_2 + \text{4-AA} + \text{EHSPT} \xrightarrow{POD} H_2O + \text{Quinone dye } (\lambda max\ 546nm)$ One unit of ADA is defined as the amount of ADA that generates one µmole of inosine from adenosine per min at 37ºC.
Reagent System	a) R1 - ADAZYME –LS: Enzyme Reagent, ready to use. b) R2 - ADAZYME -LS : Starter Reagent, ready to use c) C - ADAZYME -LS : Calibrator (Lyophilized)
Test duration	11 mins
Storage / Stability	2-8°C, 18 months
In Use Stability	Reconstituted Calibrator is stable for 15 days at 2-8°C.

Presentation	**Pack**	**Cat.No.**
Adazyme™ LS	10 ml	1102310010
	25 ml	1102310025