

Recombinant 3 α -Hydroxysteroid Dehydrogenase (HSD)

Product Information

Cat#	BDE-055
Description	3 α -Hydroxysteroid dehydrogenase (HSD) is a steroid dehydrogenase that reversibly catalyzes the oxidation/reduction of 3-hydroxy/keto groups in C19–27 steroids. It has an optimal pH of 7–9, an isoelectric point of 4.8, and is inhibited by Hg ²⁺ and Ag ⁺ but remains stable with EDTA.
Applications	Used in total bile acid and steroid hormone detection kits to enable highly sensitive enzymatic assays.
Enzyme Commission Number	EC 1.1.1.50
Form	White lyophilized powder
Source	Recombinant protein expression
Activity	50 U/mg
Unit Definition	One unit is defined as the amount of enzyme required to catalyze the oxidation of 1 μ mol of androstenone per minute under specified assay conditions (25 °C, pH 8.9).
Molecular Weight	28 kDa (SDS-PAGE)
Purity	\geq 90% by SDS-PAGE
Storage Buffer	20 mM Tris, pH 8.0
Storage	Freeze-dried powder: Store at 4°C for one year or at -20°C for two years (sub-aliquoting is recommended to avoid repeated freeze-thaw cycles).