

## Human OxLDL Antibody Pair Set

**Catalog No.** E-KAB-0163

**Applications**

ELISA

**Synonyms** OL

### Kit components & Storage

Title	Specifications	Storage
Human OxLDL Capture Antibody	1 vial, 100 µg	Store at -20℃ for one year. Avoid freeze / thaw cycles.
Human OxLDL Detection Antibody (Biotin)	1 vial, 50 µL	Store at -20℃ for one year. Avoid freeze / thaw cycles.

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

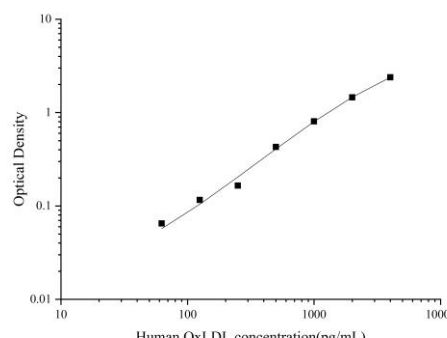
### Product Information

Items		Characteristic (E-KAB-0163)	
		Human OxLDL Capture Antibody	Human OxLDL Detection Antibody (Biotin)
Immunogen Information	Immunogen	Native Protein	Native Protein
	Swissprot	/	
Product details	Reactivity	Human	Human
	Host	Mouse	Mouse
	Conjugation	Unconjugated	Biotin
	Concentration	0.5mg/mL	/
	Buffer	PBS with 0.04% Proclin 300, 50% glycerol, pH 7.4	PBS with 0.04% Proclin 300, 1% protective protein, 50% glycerol, pH 7.4
	Purify	Protein A	Protein A
	Specificity	Detects Human OxLDL in ELISAs.	

### For Research Use Only

## Applications

### Human OxLDL Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4μg/mL	Human OxLDL Capture Antibody	 <table><caption>Approximate data points from the standard curve</caption><thead><tr><th>Human OxLDL concentration (pg/mL)</th><th>Optical Density</th></tr></thead><tbody><tr><td>50</td><td>0.05</td></tr><tr><td>100</td><td>0.1</td></tr><tr><td>200</td><td>0.2</td></tr><tr><td>500</td><td>0.5</td></tr><tr><td>1000</td><td>1.0</td></tr><tr><td>2000</td><td>2.0</td></tr><tr><td>5000</td><td>5.0</td></tr></tbody></table>	Human OxLDL concentration (pg/mL)	Optical Density	50	0.05	100	0.1	200	0.2	500	0.5	1000	1.0	2000	2.0	5000	5.0
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ELISA Detection	1:1000-1:10000	Human OxLDL Detection Antibody (Biotin)																	

**Note:** This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

## Background

Oxidized LDL (Ox-LDL) is a class of modified LDL. In addition to oxidation-modified LDL, modified LDL also includes acetylated LDL directly combined with malondialdehyde (MDA) and 4-hydroxylenic acid (4-HNE). These LDL which are not oxidation-modified but only chemically modified are called derived LDL. Different from derived LDL, Ox-LDL has unique physiological characteristics in the following aspects: (1) Ox-LDL can affect the metabolism of arachidonic acid and inhibit the esterification of cholesterol, but the derived LDL has no such effect, (2) Ox-LDL consumes endogenous antioxidant substances in LDL and reduces vitamin E content in LDL, while MDA-LDL has no such effect, (3) Oxidative modification involves lipid peroxidation, and PUFAs in LDL are oxidized, (4) When oxidized LDL is low in oxidation degree, ApoB degrades, When the oxidation degree is high, ApoB can be repolymerized. Ox-LDL is not metabolized by LDL receptors, and is recognized, bound, and endocytosed into cells by scavenger receptors. The normal cholesterol metabolism pathway is lost, resulting in intracellular lipid deposition and foam-like transformation.

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