# **Elabscience**®

ELISA

# Rat sCD14 Antibody Pair Set

Catalog No.	E-KAB-0678	Applications
Synonyms	CD14 Antigen; Monocyte Differentiation Antigen CD14	

#### **Kit components & Storage**

Title	Specifications	Storage
Rat sCD14 Capture Antibody	1 vial, 100 µ g	Store at -20°C. Avoid freeze /
		thaw cycles.
Rat sCD14 Detection Antibody (Biotin)	1 vial, 50 μL	Store at -20°C. Avoid freeze /
		thaw cycles.

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

### **Product Information**

Items		Characteristic (E-KAB-0678)	
		Rat sCD14 Capture Antibody	Rat sCD14 Detection Antibody (Biotin)
Immunogen	Immunogen	Recombinant Rat sCD14 protein	Recombinant Rat sCD14 protein
Information	Swissprot	Q63691	
Product details	Reactivity	Rat	Rat
	Host	Rabbit	Rabbit
	Conjugation	Unconjugated	Biotin
	Concentration	0.5mg/mL	/
	Buffer	PBS with 0.04% Proclin 300, 50%	PBS with 0.04% Proclin 300, 1%
		glycerol, pH 7.4	protective protein, 50% glycerol, pH
			7.4
	Purify	Affinity purification	Affinity purification
	Specificity	Detects Rat sCD14 in ELISAs.	

For Research Use Only

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### Applications

#### Rat sCD14 Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images
ELISA	0.5-4ug/mL	Rat sCD14 Capture	
Capture		Antibody	Aig
ELISA	1:1000-1:10000	Rat sCD14 Detection	Optical Density
Detection		Antibody (Biotin)	
			0.01 41 1 10 100 1000 Rat sCD14 concentration (ng/mL)

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

## Background

CD14 is a pattern recognition receptor important in innate immunity. CD14 exists in two forms, as a glycosylphosphatidylinositol-anchored protein on the surface of mononuclear cells and as a soluble protein in the blood. CD14 is shed from the surface of CD14-expressing cells, resulting in the soluble CD14 protein (sCD14). CD14 is down regulated from the cell membrane on stimulated monocytes by different factors such as LPS, IFNγ, PMA, calcium ionophore A 23187, and antibodies against CD14. CD14 can be released from the cells with GPI-phospholipase C and D (PLC/D). Membrane associated CD14 is a pro-inflammatory correceptor for LPS, a characteristic constituent of the cell wall of Gram-negative bacteria. Elevated levels of sCD14 has been detected in serum of patients with different diseases such as systemic lupus erythematosus, HIV infected patients, common variable immunodeficiency (CVID), and nonalcoholic fatty liver disease (NAFLD). Also, high levels of sCD14 have been associated with infectious diseases, including sepsis.