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ABOUT US

ENZY

Product data

Human Eosinophil Peroxidase

CAS No: 9003

Product	Human Eosinophil Peroxidase
Product No.	700-03-002
Origin	Prepared from human blood that has been shown by certified tests to be negative for HbsAg, HCV and HIV antibodies.
CAS Number	9003-99-0
EC Number	1.11.1.7
Batch No.	230410
MW	70 500 Da
Storage	Stored below 0°C this lyophilized product is stable for years. Storage of the reconstituted form at 4°C for 2 weeks has no effect on enzyme activity. If solutions must be stored for extended periods of time, protein concentration should be kept above 1 mg mL ⁻¹ , and the activity should be determined prior to use.

EN2

Human
Eosinophil
Peroxidase

CAS 9003-99-0

Handling: If you are not trained or are unaware of the hazards involved, do not use these contents. Do not take internally, do not use gloves and mask when handling this product. Avoid contact by all modes of exposure.
Human Myeloperoxidase

Test/Analysis	Specifications	Results
Appearance		solid
SDS purity		≥ 95
Reinheitszahl	$A_{413\text{nm}} / A_{280\text{nm}}$	≥ 1.0 (see UV/vis Spectrum)
Solubility	Calculated with a molar extinction coefficient of 110.000 M ⁻¹ cm ⁻¹ at 413 nm	Reconstitution of 100 µg with 1000 µL distilled water gives approximately a 1.4 µM solution

MCD Assay	100 mM Phosphate buffer pH 7	results of the linear regression model: $y = a_0 + a_1 \cdot x$
	10 mM NaBr	
	100 µM MCD (Monochlorodimedon)	
	100 µM HOOH	$a_1/1 = 1.761$
	10 nM EPO	$a_1/2 = 1.534$

$$a1/3 = 1.692$$

One unit of halogenation activity is defined as the amount of enzyme that halogenates 1 μmol of MCD min^{-1} at pH 7.0 and 25 °C.

$$= 1.662 \text{ min}^{-1} = 83.5 \mu\text{M MCD min}^{-1}$$

117.7 Units mg^{-1}

Guaiaacol Assay

100 mM Phosphate buffer pH 7
100 μM guaiaacol
100 μM HOOH
50 nM EPO

results of the linear regression
Model: $y=a0+a1*x$

$$a1/1 = 1.273$$

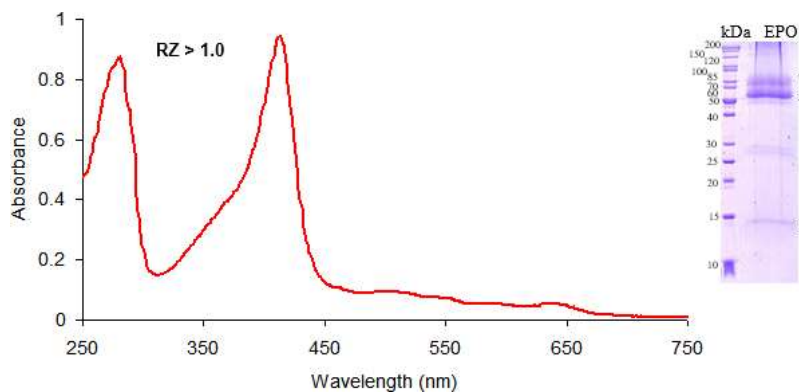
$$a1/2 = 1.362$$

$$a1/3 = 1.226$$

One unit of peroxidase activity is defined as the amount of enzyme that oxidises 1 μmol of guaiaacol min^{-1} at pH 7.0 and 25 °C.

$$= 1.29 \text{ min}^{-1} = 48.5 \mu\text{M guaiaacol min}^{-1}$$

13.75 Units mg^{-1}



*EPO stock solution was adjusted photometrically and a minimum of **11.7 Units** (= 117 Units per mg) were filled in each vial prepared for lyophilisation.*

*Solid lyophilisate per vial contains a minimum **100 μg active EPO** + marginally amounts of salts and impurities (< 50 μg).*

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