

## MPO

### Native Human Myeloperoxidase (MPO)

<b>Catalog No.</b>	CS230A CS230B	<b>Quantity:</b>	100 µg 1.0 mg
<b>Alternate Names:</b>	MPO		
<b>Description:</b>	<p>Myeloperoxidase is a heme protein synthesized during myeloid differentiation that constitutes the major component of neutrophil azurophilic granules. Produced as a single chain precursor, myeloperoxidase is subsequently cleaved into a light and heavy chain. The mature myeloperoxidase is a tetramer composed of two light chains and two heavy chains. This enzyme produces hypohalous acids central to the microbicidal activity of neutrophils.</p> <p>Myeloperoxidase purified from leucocytes of purulent human sputum. Supplied as a lyophilized, salt-free, green soluble powder.</p>		
<b>UniProt ID:</b>	P05164		
<b>Gene ID:</b>	4353		
<b>Source:</b>	Human sputum		
<b>Molecular Weight:</b>	130,000 - 150,000 Da		
<b>Formulation:</b>	Lyophilized from 50 mM Na acetate, pH 6.0 with 100 mM NaCl		
<b>Purity:</b>	>95% by SDS-PAGE analysis		
<b>Extinction Coefficient:</b>	$E^{0.1\%}_{280\text{nm}} = 1.45$		
<b>Specific Activity:</b>	180-220 Units/mg		
<b>Unit Definition:</b>	One unit is defined as the amount of enzyme that decomposes one umole of hydrogen peroxide per minute at 25°C , pH 6.0. Reaction mixture contains 30mM sodium phosphate, pH 6.1, 30mM guaiacol, and 0.0012% (0.35mM) hydrogen peroxide.		
<b>Reconstitution:</b>	Reconstitute at 0.1-1.0 mg/ml using 0.1 M KPO <sub>4</sub> , pH 7.0. Allow several minutes for complete reconstitution. <b>Do not vortex.</b>		
<b>Storage &amp; Stability:</b>	Store at -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -80°C. <b>Avoid repeated freeze-thaw cycles.</b>		
<b>Certification:</b>	Prepared from donors shown to be non reactive for HbsAG, anti-HCV, anti-HBc, and negative for anti-HIV 1 & 2 by FDA approved tests.		



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