RayBiotech, Inc.
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Certificate of Analysis and Data Sheet

Recombinant Human Heme Oxygenase 1

Catalog No.	**Source**
228-10769	*Escherichia Coli.*

Synonyms
HO-1, HSP32, bK286B10, HMOX-1, Heme oxygenase 1, HMOX1, HO, HO1.

Introduction:
HMOX1 cleaves the heme ring at the alpha methene bridge to form Biliverdin. Biliverdin is then converted to Bilirubin by Biliverdin reductase. In physiological state, the highest activity of HMOX1 is found in the spleen, where senescent erythrocytes are sequestrated and destroyed. Heme Oxygenase-1 is involved in the regulation of cardiovascular function and its adaptive response to a variety of stressors. HMOX1 is induced in the colon of ulcerative colitis. HMOX1 is found to overexpress with a higher extent of intraplaque angiogenesis implies a multi-faceted role for HMOX1 in modulating the progression of atherosclerosis. HMOX1 expression reduced LPS-stimulated secretion of MCP-1, IL-6, IL-10, and TNF-alpha in murine and human macrophages.

Description
HO-1 Human Recombinant protein produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 274 amino acids (1-266) and having a molecular mass of 31.4 kDa. HO-1 is fused to 8 amino acid His Tag at C-Terminus and purified by proprietary chromatographic techniques.

Physical Appearance
Sterile filtered colorless solution.

Formulation
HMOX1 solution containing 20mM Tris pH-8, 50mM NaCl, 0.1mM PMSF and 10% glycerol.

Stability
HMOX1 Human Recombinant although stable at 4°C for 1 week, should be stored desiccated below -18°C.
Please prevent freeze-thaw cycles.

Purity
Greater than 95.0% as determined by SDS-PAGE.

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Amino acid sequence

MERPQPHSMP QDLSEALKEA TKEVHTQAEN AEFMRNFQKG QVTRDGFKLV
MASLYHIYVA LEEEIERNKE SPVFAPVYFP EELHRKAALEQDLAFWYGPR
WQEVIPYTPA MQRYVKRLHE VGRTEPELLV AHAYTRYLGD LSGGQVLKKI
AQKALDLPSS GEGLAFFTFP NIASATKFKQLYRSRMNSLE MTPAVRQRVI
EEAKTAFLLN IQLFEELQEL LTHDTKDQSP SRAPGLRQRA SNKVQDSAPV
ETPRGKPPLN TRSQAPLEHHHHHH.