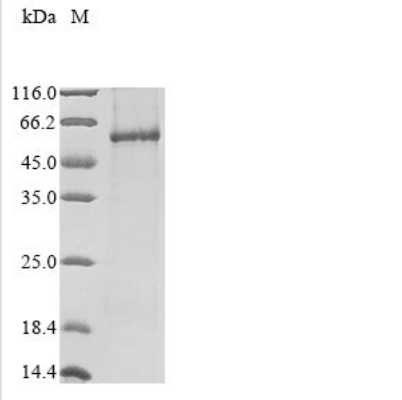
Recombinant Human NADPH oxidase 1 (NOX1)

Product Code	CSB-CF015959HU
Abbreviation	Recombinant Human NOX1 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q9Y5S8
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	MGNWVVNHWFSVLFLVVWLGLNVFLFVDAFLKYEKADKYYYTRKILGSTLACA RASALCLNFNSTLILLPVCRNLLSFLRGTCSFCSRTLRKQLDHNLTFHKLVAYMI CLHTAIHIIAHLFNFDCYSRSRQATDGSLASILSSLSHDEKKGGSWLNPIQSRNT TVEYVTFTSIAGLTGVIMTIALILMVTSATEFIRRSYFEVFWYTHHLFIFYILGLGIH GIGGIVRGQTEESMNESHPRKCAESFEMWDDRDSHCRRPKFEGHPPESWK WILAPVILYICERILRFYRSQQKVVITKVVMHPSKVLELQMNKRGFSMEVGQYIF VNCPSISLLEWHPFTLTSAPEEDFFSIHIRAAGDWTENLIRAFEQQYSPIPRIEV DGPFGTASEDVFQYEVAVLVGAGIGVTPFASILKSIWYKFQCADHNLKTKKIYF YWICRETGAFSWFNNLLTSLEQEMEELGKVGFLNYRLFLTGWDSNIVGHAALN FDKATDIVTGLKQKTSFGRPMWDNEFSTIATSHPKSVVGVFLCGPRTLAKSLR KCCHRYSSLDPRKVQFYFNKENF
Research Area	Others
Source	in vitro E.coli expression system
Target Names	NOX1
Expression Region	1-564aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged
Mol. Weight	67.7 kDa
Protein Length	Full Length
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

This recombinant HumanNOX1 protein is an in vitro E.coli (cell-free) expressed Full Length protein. Its purity is 85%+ determined by SDS-PAGE. Cell-free protein expression is the in vitro synthesis of a protein using translation-compatible extracts of whole cells. In principle, whole-cell extracts contain all the macromolecules and components needed for transcription, translation, and even post-translational modification. These components include RNA polymerase, regulatory protein factors, transcription factors, ribosomes, and tRNA. When supplemented with cofactors, nucleotides, and the specific gene template, these extracts can synthesize proteins of interest in a few hours.

NOX1 is predominantly expressed in colon epithelium and helps to maintain the epithelial barrier and mucosal homeostasis, as well as promote wound healing in the intestinal mucosa by activating focal cell-matrix adhesion proteins and cell motility. NOX1 exerts roles during tissue damage and repair primarily through the modulation of the function of repair cells, including epithelial cells, fibroblast cells, endothelial cells, and smooth muscle cells. It contributes to the rapid generation of ROS in response to IL-13 and interferon-gamma stimulation in human intestinal epithelial cells. NOX1 and its production ROS further take part in intracellular signaling processes regulating the expression of genes that are involved in cell proliferation, differentiation, and tissue repair.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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