

## Product datasheet

# Recombinant Human FGE protein ab151647

### Description

---

<b>Product name</b>	Recombinant Human FGE protein
<b>Purity</b>	> 95 % SDS-PAGE. ab151647 was determined to be >95% pure by SEC-HPLC and reducing SDS-PAGE.
<b>Endotoxin level</b>	< 1.000 Eu/μg
<b>Expression system</b>	HEK 293 cells
<b>Accession</b>	<b><u>Q8NBK3</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	SQEAGTGAGAGSLAGSCGCGTPQRPGAHGSSAAAHRY REANAPGPVPG RQLAHSKMVPIAGVFTMGTD DPQIKQDGEAPARRVTIDA FYMDAYEVS NTEFEKFNSTGYL TEAEKFGDSFVFEGMLSEQVKTNIQQA VAAAPWWLPV KGANWRHPEGPDSTILHRPDHPVLHVS WINDAVAYCTWAGKRLPTEAEWEY SCRGGLHNRLFPWGNKLPKQGHYANWQGE FPVTNTGEDGFQGTAPVDA FPPNGYGLYNIVGNAWEWTS DWWTVHHSVEETLNPKGP PSGKDRVKKGGS YMCHRSYCYRYRCAARSQNTPDSSAS NLGFRCAADRLLPTMDVHHHHHH
<b>Predicted molecular weight</b>	38 kDa
<b>Amino acids</b>	34 to 374
<b>Tags</b>	His tag C-Terminus

### Specifications

---

Our **Abpromise guarantee** covers the use of **ab151647** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** SDS-PAGE

HPLC

<b>Form</b>	Liquid
<b>Additional notes</b>	ab151647 was produced by a mammalian cell expression system in HEK293. This product was previously labelled as SUMF1

## Preparation and Storage

---

<b>Stability and Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles. pH: 7.50 Constituents: 0.02% Calcium chloride, 0.32% Tris HCl, 10% Glycerol (glycerin, glycerine), 0.88% Sodium chloride
------------------------------	---

## General Info

---

<b>Function</b>	Using molecular oxygen and an unidentified reducing agent, oxidizes a cysteine residue in the substrate sulfatase to an active site 3-oxoalanine residue, which is also called C(alpha)-formylglycine. Known substrates include GALNS, ARSA, STS and ARSE.
<b>Tissue specificity</b>	Ubiquitous. Highly expressed in kidney, pancreas and liver. Detected at lower levels in leukocytes, lung, placenta, small intestine, skeletal muscle and heart.
<b>Pathway</b>	Protein modification; sulfatase oxidation.
<b>Involvement in disease</b>	Defects in SUMF1 are the cause of multiple sulfatase deficiency (MSD) [MIM:272200]. MSD is a clinically and biochemically heterogeneous disorder caused by the simultaneous impairment of all sulfatases, due to defective post-translational modification and activation. It combines features of individual sulfatase deficiencies such as metachromatic leukodystrophy, mucopolysaccharidosis, chondrodysplasia punctata, hydrocephalus, ichthyosis, neurologic deterioration and developmental delay. Inheritance is autosomal recessive.
<b>Sequence similarities</b>	Belongs to the sulfatase-modifying factor family.
<b>Post-translational modifications</b>	N-glycosylated. Contains high-mannose-type oligosaccharides.
<b>Cellular localization</b>	Endoplasmic reticulum lumen.

---

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors