# abcam

# Product datasheet

# Human OGA ELISA Kit ab 269546

ישעבעדער SimpleStep ELISA

画像数5

製品の概要

再現性

添加回収試験

製品名 Human OGA ELISA Kit

検出方法 Colorimetric

サンプル	N	平均値	SD	CV%
Extract	8			2.6%

Inter-Assay(日差再現性)

特定サンプルでの回収試験

Intra-Assay(同時再現性)

サンプル	N	平均值	SD	CV%
Extract	4			2.8%

サンプルの種類 Cell culture extracts

アッセイタイプ Sandwich (quantitative)

検出感度 0.4 ng/ml

検出範囲 1.2 ng/ml - 75 ng/ml

サンプルの種類	平均 %	測定範囲
Cell culture extracts	84	81% - 90%

全工程の試験時間 1h 30m

ステップ One step assay

種交差性 交差種: Human

製品の概要 Human OGA ELISA Kit (ab269546) is a single-wash 90 min sandwich ELISA designed for the

> quantitative measurement of OGA protein in cell culture extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human OGA with 0.4 ng/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This

approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

## 特記事項

Protein O-GlcNAcase (OGA, NAG), also referred to as Beta-N-Acetylhexosaminidase and Meningioma-expressed antigen 5 (MGEA5) is a 916 amino acid enzyme encoded by the gene *OGA*. OGA catalyzes the hydrolysis of GlcNac (N-acetyl-Beta-D-glucosamine) from O-glycosylated serine or threonine residues to form free N-acetyl-D-glucosamine generally in the cytosol. Thiazoline derivatives of GlcNAc have been found to act as OGA enzyme inhibitors by mimicking the reaction intermediates. OGA has a broad range of proteins that act as substrates, which may modulate downstream effects such as transcription and proteomic activities. OGA plays a role in embryonic development, brain activity, and hormone production.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances. It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

### 試験プラットフォーム

Microplate (12 x 8 well strips)

#### 製品の特性

# 保存方法

#### Store at +4°C. Please refer to protocols.

内容	1 x 96 tests
10X Human OGA Capture Antibody	1 x 600µl
10X Human OGA Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 5BR	1 x 6ml
Human OGA Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 12ml

内容	1 x 96 tests
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

機能

Isoform 1: Cleaves GlcNAc but not GalNAc from O-glycosylated proteins. Can use p-nitrophenyl-beta-GlcNAc and 4-methylumbelliferone-GlcNAc as substrates but not p-nitrophenyl-beta-GalNAc or p-nitrophenyl-alpha-GlcNAc (in vitro) (PubMed:11148210). Does not bind acetyl-CoA and does not have histone acetyltransferase activity (PubMed:24088714).

lsoform 3: Cleaves GlcNAc but not GalNAc from O-glycosylated proteins. Can use p-nitrophenyl-beta-GlcNAc as substrate but not p-nitrophenyl-beta-GalNAc or p-nitrophenyl-alpha-GlcNAc (in vitro), but has about six times lower specific activity than isoform 1.

組織特異性 Ubiquitous. Shows highest expression in the brain, placenta and pancreas.

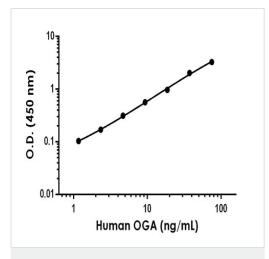
**配列類似性** Belongs to the glycosyl hydrolase 84 family.

翻訳後修飾 Proteolytically cleaved by caspase-3 during apoptosis. The fragments interact with each other;

cleavage does not decrease enzyme activity.

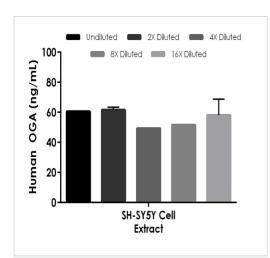
**細胞内局在** Cytoplasm and Nucleus.

### 画像



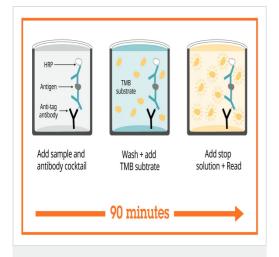
Example of human OGA standard curve in Sample Diluent 1X Cell Extraction Buffer PTR.

The OGA standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



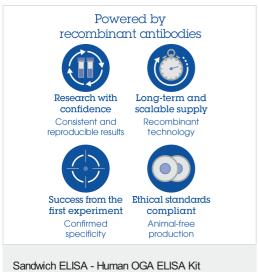
Interpolated concentrations of native OGA in human SH-SY5Y cell extract based on a 200 µg/mL extract load.

The concentrations of OGA were measured in duplicate and interpolated from the OGA standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



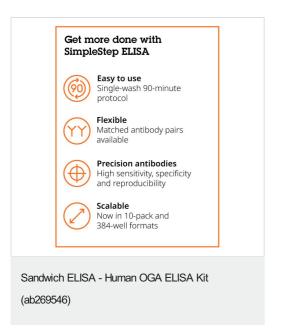
Sandwich ELISA - Human OGA ELISA Kit (ab269546)

SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



To learn more about the advantages of recombinant antibodies see **here**.

(ab269546)



To learn more about the advantages of SimpleStep  $\mathsf{ELISA}^{@}$  kits see **here**.

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