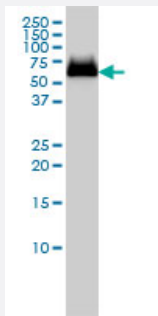


GBA monoclonal antibody (M01), clone 2E2

Catalog # H00002629-M01

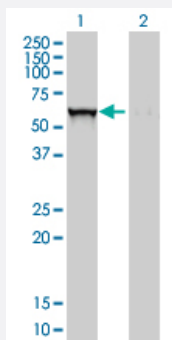
Size 100 ug

Applications



Western Blot (Cell lysate)

GBA monoclonal antibody (M01), clone 2E2 Western Blot analysis of GBA expression in MCF-7 (Cat # L046V1).

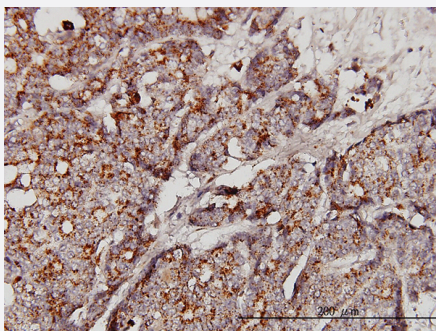


Western Blot (Transfected lysate)

Western Blot analysis of GBA expression in transfected 293T cell line by GBA monoclonal antibody (M01), clone 2E2.

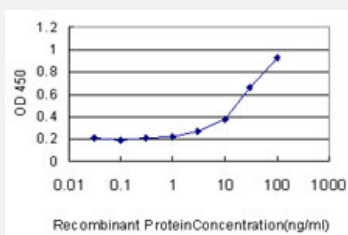
Lane 1: GBA transfected lysate(60 KDa).

Lane 2: Non-transfected lysate.



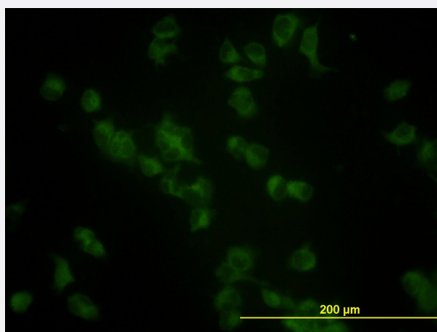
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to GBA on formalin-fixed paraffin-embedded human breast cancer. [antibody concentration 3 ug/ml]



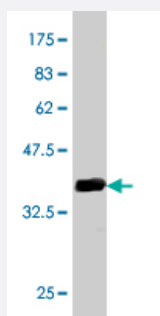
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged GBA is approximately 1ng/ml as a capture antibody.



Immunofluorescence

Immunofluorescence of monoclonal antibody to GBA on HeLa cell. [antibody concentration 10 ug/ml]



Western Blot detection against Immunogen (35.64 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant GBA.
Immunogen	GBA (NP_000148, 146 a.a. ~ 235 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	SYFSEEGIGYNIIRVPMASCDIFSIRTYTYADTPDDFQLHNFSLPEEDTKLKIPLIHRALQLAQRPVSL ASPWTSPTWLKTNGAVNGKGS
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (84); Rat (88)
Isotype	IgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (35.64 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

GBA monoclonal antibody (M01), clone 2E2 Western Blot analysis of GBA expression in MCF-7 (Cat # L046V1).

[Protocol Download](#)

- Western Blot (Transfected lysate)

Western Blot analysis of GBA expression in transfected 293T cell line by GBA monoclonal antibody (M01), clone 2E2.

Lane 1: GBA transfected lysate(60 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to GBA on formalin-fixed paraffin-embedded human breast cancer. [antibody concentration 3 ug/ml]

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged GBA is approximately 1ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

- Immunofluorescence

Immunofluorescence of monoclonal antibody to GBA on HeLa cell. [antibody concentration 10 ug/ml]

Gene Info — GBA

Entrez GeneID	2629
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GeneBank Accession#	NM_000157
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Protein Accession#	NP_000148
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Gene Name	GBA
Gene Alias	GBA1, GCB, GLUC
Gene Description	glucosidase, beta; acid (includes glucosylceramidase)
Omim ID	230800 230900 231000 231005 606463 608013
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a lysosomal membrane protein that cleaves the beta-glucosidic linkage of glycosylceramide, an intermediate in glycolipid metabolism. Mutations in this gene cause Gaucher disease, a lysosomal storage disease characterized by an accumulation of glucocerebrosides. A related pseudogene is approximately 12 kb downstream of this gene on chromosome 1. Alternative splicing results in multiple transcript variants encoding the same protein. [provided by RefSeq]
Other Designations	D-glucosyl-N-acylsphingosine glucosylhydrolase[OTTHUMP00000033992][OTTHUMP00000033993][glucocerebrosidase][glucocerebrosidase (alt.)][lysosomal glucocerebrosidase]

Publication Reference

- [Inhibition of cysteine protease cathepsin L increases the level and activity of lysosomal glucocerebrosidase.](#)

Myung Jong Kim, Soojin Kim, Thomas Reinheckel, Dimitri Krainc.

JCI Insight 2024 Feb; 9(3):e169594.

Application: IF, Human, Fibroblast, HEK293-FT cells

- [Production of recombinant human acid \$\beta\$ -glucosidase with high mannose-type N-glycans in rice gnt1 mutant for potential treatment of Gaucher disease.](#)

Jung JW, Choi HY, Huy NX, Park H, Kim HH, Yang MS, Kang SH, Kim DI, Kim NS.

Protein Expression and Purification 2019 Feb; 158:81.

Application: WB-Re, Mouse, Recombinant proteins from transgenic rice suspension cell culture medium

- [Reduced glucocerebrosidase activity in monocytes from patients with Parkinson's disease.](#)

Atashrazm F, Hammond D, Perera G, Dobson-Stone C, Mueller N, Pickford R, Kim WS, Kwok JB, Lewis SJG, Halliday GM, Dzamko N.

Scientific Reports 2018 Oct; 8(1):15446.

Application: WB-Tr, Human, HEK 293 cells, Lymphocytes, Monocytes

- [Parkin-mediated ubiquitination of mutant glucocerebrosidase leads to competition with its substrates PARIS and ARTS.](#)

Bendikov-Bar I, Rapaport D, Larisch S, Horowitz M.

Orphanet Journal of Rare Diseases 2014 Jun; 9:86.

Application: IP, WB-Ce, Human, Skin fibroblasts

- [Reduced glucocerebrosidase is associated with increased \$\alpha\$ -synuclein in sporadic Parkinson's disease.](#)

Murphy KE, Gysbers AM, Abbott SK, Tayebi N, Kim WS, Sidransky E, Cooper A, Garner B, Halliday GM.

Brain : A Journal of Neurology. 2014 Mar; 137(Pt 3):834.

Application: WB-Ti, Human, Brain

- [Gaucher disease paradigm: from ERAD to comorbidity.](#)

Bendikov-Bar I, Horowitz M.

Human Mutation 2012 Oct; 33(10):1398.

Application: WB-Ce, Human, Human skin fibroblasts

- [Characterization of the ERAD process of the L444P mutant glucocerebrosidase variant.](#)

Bendikov-Bar I, Ron I, Filocamo M, Horowitz M.

Blood Cells, Molecules & Diseases 2011 Jan; 46(1):4.

Application: WB-Ce, Human, Fibroblasts

- [Characterization of Gaucher disease bone marrow mesenchymal stromal cells reveals an altered inflammatory secretome.](#)

Campeau PM, Rafei M, Boivin MN, Sun Y, Grabowski GA, Galipeau J.

Blood 2009 Oct; 114(15):3181.

Application: WB, Human, Mesenchymal stromal cells

Pathway

- [Lysosome](#)
- [Metabolic pathways](#)
- [Other glycan degradation](#)
- [Sphingolipid metabolism](#)

Disease

- [Alzheimer disease](#)
- [Bone Diseases](#)
- [Cardiovascular Diseases](#)

- [Cognition Disorders](#)
- [Cystic fibrosis](#)
- [Deafness](#)
- [Dementia](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
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- [Epilepsy](#)
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- [Gaucher disease](#)
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- [Parkinson disease](#)
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- [Postmortem Changes](#)
- [Supranuclear Palsy](#)