

Protein database: SWISS-PROT

Protein information: experimental data or predicted

1. Protein maturation

- Cuts within the amino acid chain

- Removal of fragments of the amino acid chain

- Chemical modification of specific amino acids

- Addition of lipid molecules

- Addition of glycosidic molecules

2. Protein destination

Getting attached to the cell membrane

Being secreted outside the cell

Being transported into the periplasm (for bacteria)

Being transported to the mitochondria or any other organelle

Being transported into the cell nucleus

3. Protein structure

The recognition and the definition of protein folds

SWISS-PROT: www.expasy.ch/sprot/

Explore with EGF-R (human receptor of EGF)
: accession number P00533

UniProtKB/Swiss-Prot entry P00533 [EGFR_HUMAN] Epidermal growth factor receptor - Microsoft Internet Explorer


파일(F) 편집(E) 보기(V) 즐겨찾기(A) 도구(I) 도움말(H)

주소(D) <http://www.expasy.org/uniprot/P00533>

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UniProtKB/Swiss-Prot entry **P00533**


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Note: most headings are clickable, even if they don't appear as links. They link to the user manual or other documents.

Entry information

Entry name	EGFR_HUMAN
Primary accession number	P00533
Secondary accession numbers	O00688 O00732 P06268 Q14225 Q92795 Q9BZS2 Q9GZX1 Q9H2C9 Q9H3C9 Q9UMD7 Q9UMD8 Q9UMG5
Integrated into Swiss-Prot on	July 21, 1986
Sequence was last modified on	November 1, 1997 (Sequence version 2)
Annotations were last modified on	April 18, 2006 (Entry version 93)

Name and origin of the protein

Protein name	Epidermal growth factor receptor [Precursor]
Synonyms	EC 2.7.10.1 Receptor tyrosine-protein kinase ErbB-1
Gene name	Name: EGFR Synonyms: EPRB1

(4개 항목 남음) http://www.expasy.org/images/expasy_logos/sm50x50.gif 그림 다운로드 중... 인터넷

1. Entry Info

Entry-number: *EGFR_HUMAN*

Primary accession number

Secondary accession number: old accession numbers

2. Name and origin

Protein name: general description

Synonyms: EC number

Gene name: for nucleotide search

From: the origin of the protein

Taxonomy: taxonomic classification of the source organism

3. The references

A list of bibliographical references

4. The comments

Any information that doesn't fit anywhere else
function, catalytic activity, subcellular location, etc

5. Cross references

Links to other databases

6. Keywords

A simple list of terms relevant to your protein

7. Features

Information on the protein is precisely mapped onto the sequence

Finding out more about proteins

1. modified amino acids

pir.georgetown.edu/pirwww/dbinfo/resid.html

www.glycosuite.com

lipid.bio.m.u-tokyo.ac.jp

chem.sis.nlm.nih.gov/chemidplus

2. Biochemical pathways

www.genome.ad.jp/kegg

brenda.bc.uni-koeln.de

www.chem.qmul.ac.uk/iubmb

www.ecocyc.org

3. Protein structure

www.rcsb.org/pdb

www.ncbi.nlm.nih.gov/Structure

scop.mrc-lmb.cam.ac.uk/scop

www.biochem.ucl.ac.uk/bsm/cath_new

www.expasy.ch/swissmod/SWISS-MODEL.html

4. Protein families

immunoetics proteins: imgt.cines.fr

restriction enzymes: rebase.neb.com

glycosidic bonds: afmb.cnrs-mrs.fr/CAZY

proteases: www.meros.co.uk

protein kinases: pkr.sdsc.edu/html/index.shtml

nuclear receptors: nrr.georgetown.edu

neural processes: senselab.med.yale.edu/senselab

COG: www.ncbi.nlm.nih.gov/COG

Assignments

Study your protein on SWISS-PROT

: everything you have to know about your protein

