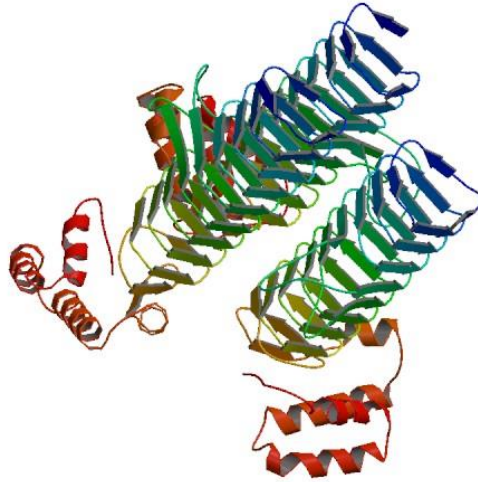


Πρωτεΐνη: *UDP N-ACETYLGLUCOSAMINE ACYLTRANSFERASE*
Κωδικός πρωτεΐνης στην PDB: *1LXA*



FASTA:

```
>sp|P0A722|LPXA_ECOLI Acyl-[acyl-carrier-protein]--UDP-N-acetylglucosamine O-acyltransferase
OS=Escherichia coli (strain K12) GN=lpxA PE=1 SV=1
MIDKSAFVHPTAIVEEGASIGANAHIGPFCIVGPHVEIGEGTVLKSHVVVNGHTKIGRDN
EIYQFASIGE VNQDLKYAGE PTRVEIGDRN RIRESVTIHR GTVQGGGLTK VGSDNLLMIN
AHIAHDCTVGNRCILANNATLAGHVSVD DFAIIGGMTAVHQFCIIGAHVMVGGCSGVAQD
VPPYVIAQGNHATPFGVNI EGLKRRGFSREAITAIRNAYKLIYRSGKTLDEVKPEIAELA
ETYPEVKAFTDFFARSTRGLIR
```

ProtParam:

User-provided sequence:

```
10 20 30 40 50 60
MIDKSAFVHP TAIVEEGASI GANAHIGPFC IVGPHVEIGE GTVLKSHVVV NGHTKIGRDN

70 80 90 100 110 120
EIYQFASIGE VNQDLKYAGE PTRVEIGDRN RIRESVTIHR GTVQGGGLTK VGSDNLLMIN

130 140 150 160 170 180
AHIAHDCTVG NRCILANNAT LAGHVSVD DFAIIGGMTAVH QFCIIGAHVM VGGCSGVAQD

190 200 210 220 230 240
VPPYVIAQGN HATPFGVNI EGLKRRGFSRE AITAIRNAYK LIYRSGKTLD EVKPEIAELA

250 260
ETYPEVKAFT DFFARSTRGL IR
```

References and documentation are available.

Number of amino acids: 262

Molecular weight: 28080.0

Theoretical pI: 6.63

Amino acid composition:

[CSV format](#)

Ala (A)	25	9.5%
Arg (R)	15	5.7%
Asn (N)	13	5.0%
Asp (D)	11	4.2%
Cys (C)	5	1.9%
Gln (Q)	6	2.3%
Glu (E)	16	6.1%
Gly (G)	30	11.5%
His (H)	12	4.6%
Ile (I)	26	9.9%
Leu (L)	12	4.6%
Lys (K)	10	3.8%
Met (M)	4	1.5%
Phe (F)	10	3.8%
Pro (P)	9	3.4%
Ser (S)	11	4.2%
Thr (T)	16	6.1%
Trp (W)	0	0.0%
Tyr (Y)	6	2.3%
Val (V)	25	9.5%
Pyl (O)	0	0.0%
Sec (U)	0	0.0%
(B)	0	0.0%
(Z)	0	0.0%
(X)	0	0.0%

Total number of negatively charged residues (Asp + Glu): 27

Total number of positively charged residues (Arg + Lys): 25

Atomic composition:

Carbon	C	1237
Hydrogen	H	1972
Nitrogen	N	360
Oxygen	O	369
Sulfur	S	9

Formula: $C_{1237}H_{1972}N_{360}O_{369}S_9$

Total number of atoms: 3947

Extinction coefficients:

This protein does not contain any Trp residues. Experience shows that this could result in more than 10% error in the computed extinction coefficient.

Extinction coefficients are in units of $M^{-1} cm^{-1}$, at 280 nm measured in water.

Ext. coefficient 9190

Abs 0.1% (=1 g/l) 0.327, assuming all pairs of Cys residues form cystines

Ext. coefficient 8940

Abs 0.1% (=1 g/l) 0.318, assuming all Cys residues are reduced

Estimated half-life:

The N-terminal of the sequence considered is M (Met).

The estimated half-life is: 30 hours (mammalian reticulocytes, in vitro).

>20 hours (yeast, in vivo).

>10 hours (Escherichia coli, in vivo).

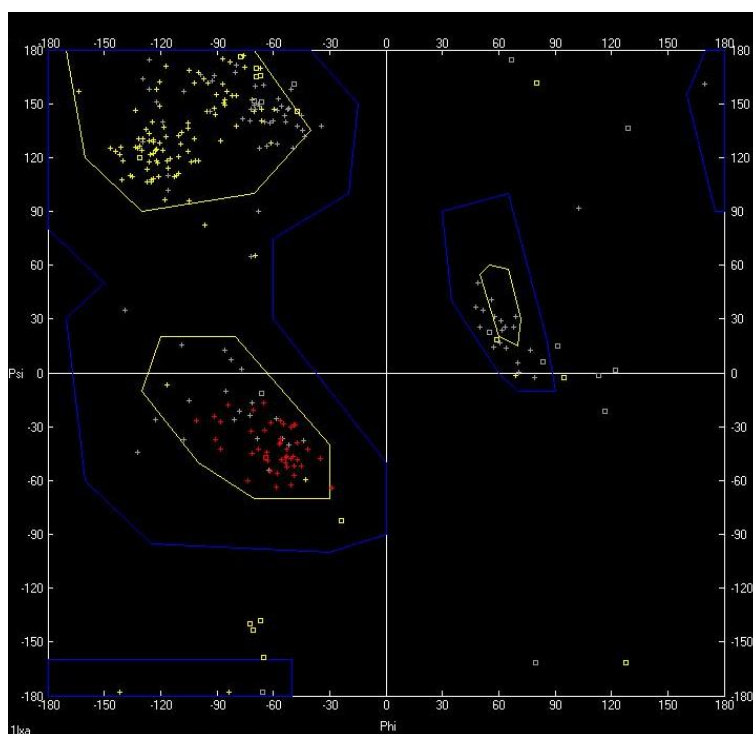
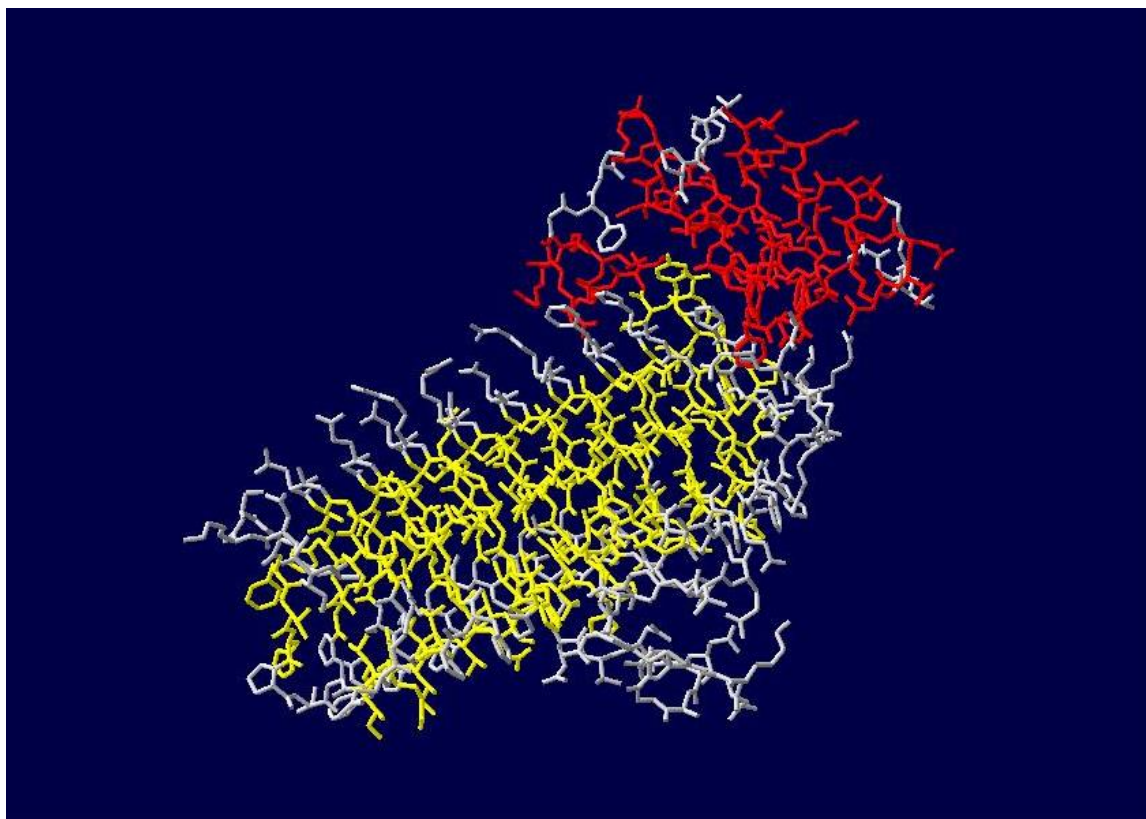
Instability index:

The instability index (II) is computed to be 27.44

This classifies the protein as stable.

Aliphatic index: 93.78

Grand average of hydropathicity (GRAVY): 0.002



Ramachandran Plot

Από το παραπάνω διάγραμμα προκύπτει ότι εκτός των επιτρεπτών ορίων κινήσεων, είναι τα ακόλουθα αμινοξέα (χρωματίζονται με πράσινο χρώμα):

GLY 17	GLY 87	GLY 189
GLY 52	GLY 106	HIS 191
GLY 57	GLY 112	GLY 196
GLY 69	GLY 130	GLY 206
GLY 79	GLY 173	GLY 259

