

**Supplementary Figure S4. The identified proteins and abundance biases in 18 pathways.**

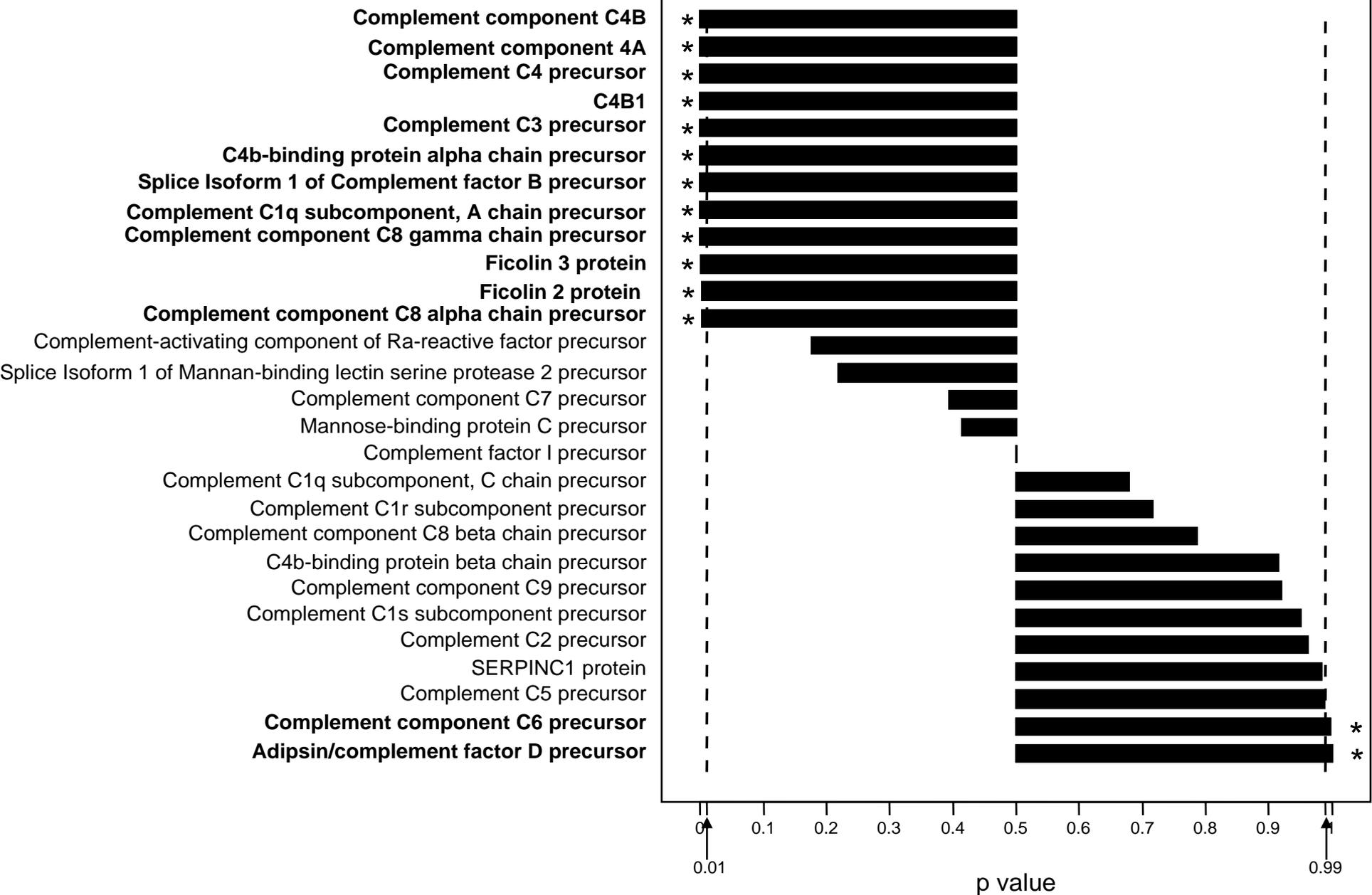
These pathway included Complement system (A), Alzheimer's disease (B), PPAR signaling pathway (C), Cell communication (D), Hematopoietic cell lineage (E), Folate biosynthesis (F), Adipocytokine signaling pathway (G), Inositol phosphate metabolism (H), Type II diabetes mellitus (I), Fatty acid metabolism (J), Arginine and praline metabolism (K), ECM-receptor interaction (L), TGF-beta signaling pathway (M), Coagulation cascade (N), Small cell lung cancer (O), Insulin signaling pathway (P), Focal adhesion (Q), Long-term depression (R). The p value of identified protein was digitized to the length of the bar in each pathway.

A

# Complement system

Enriched in diabetic serum

Enriched in non-diabetic serum

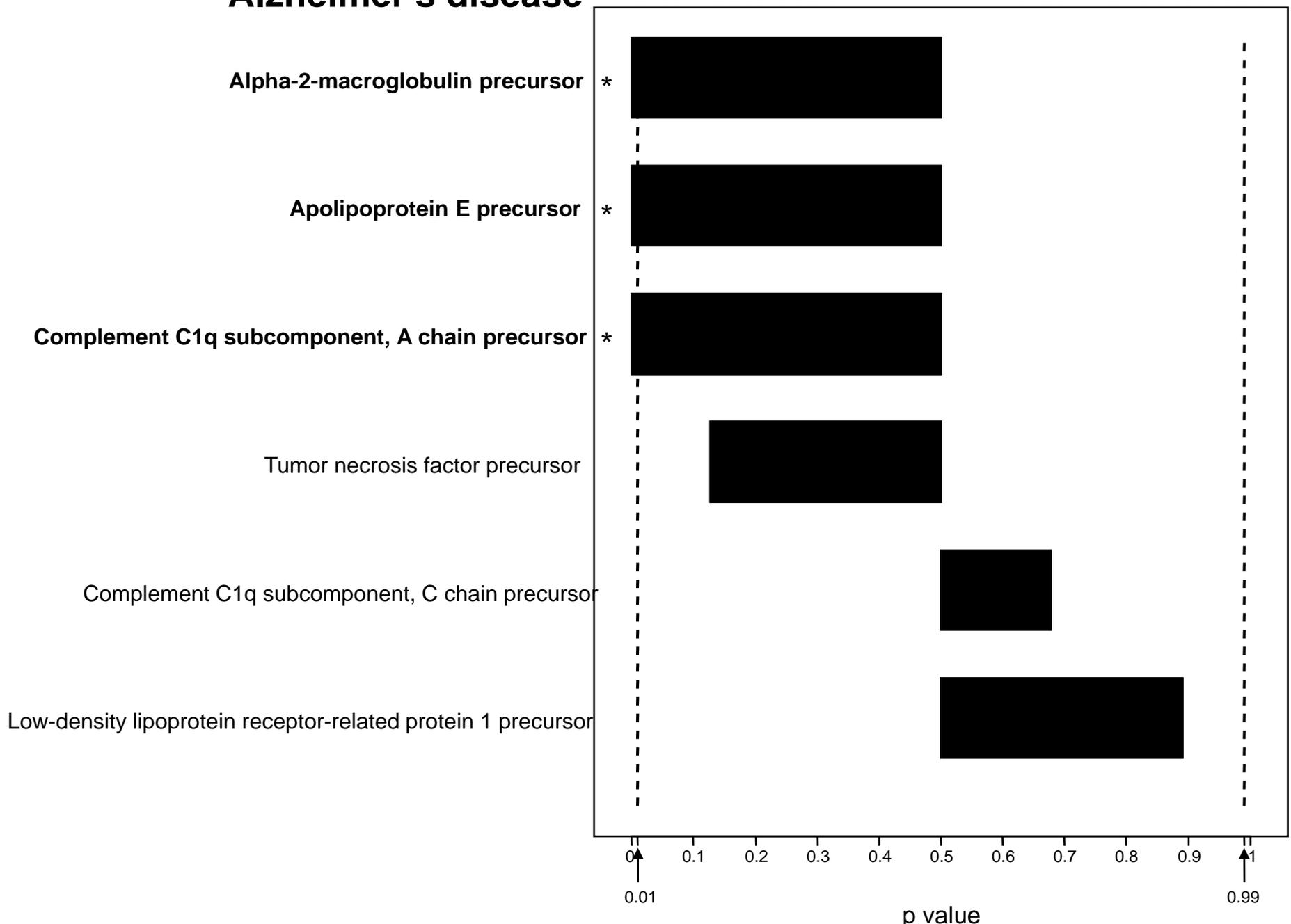


B

# Alzheimer's disease

Enriched in diabetic serum

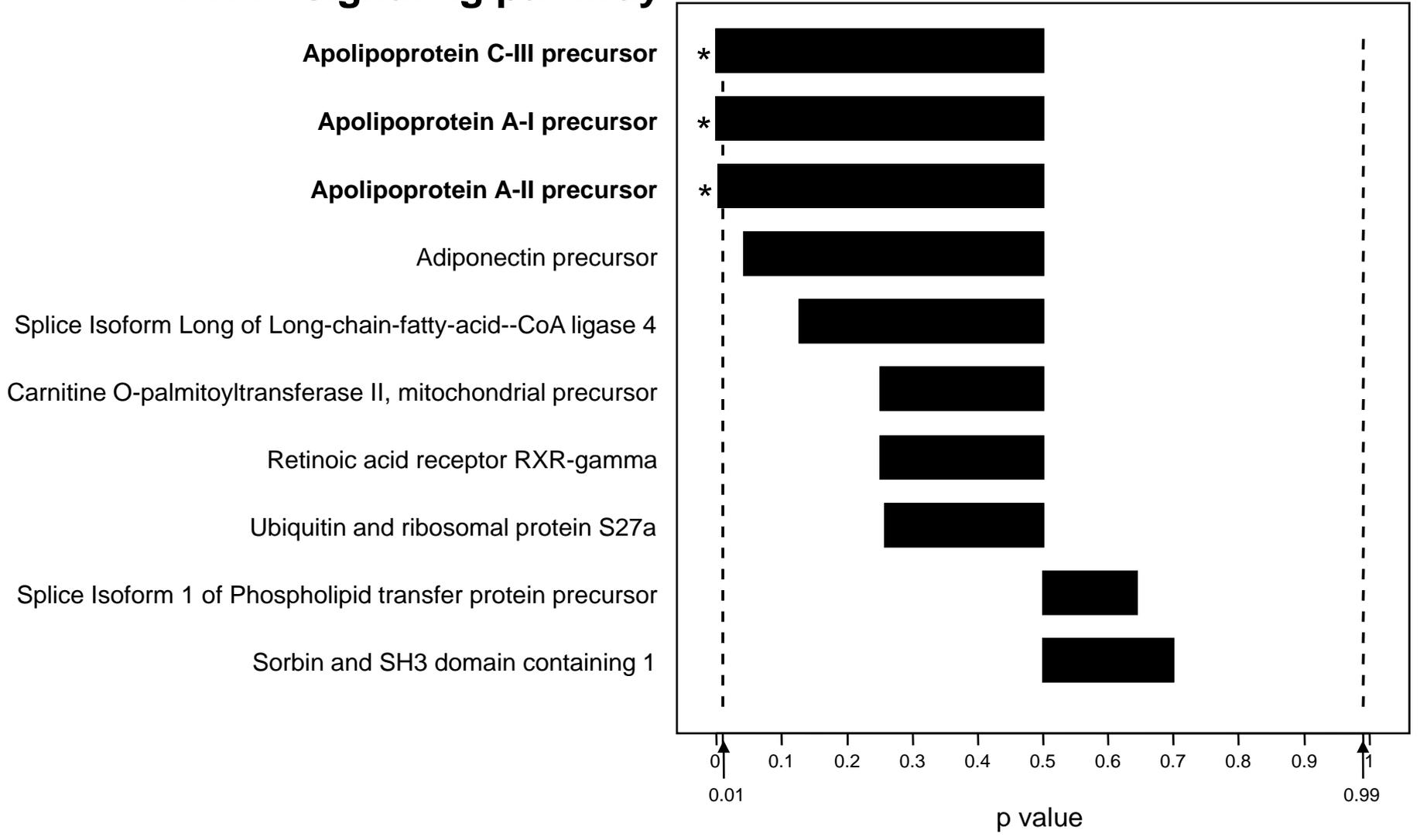
Enriched in non-diabetic serum



C

# PPAR signaling pathway

Enriched in diabetic serum      Enriched in non-diabetic serum

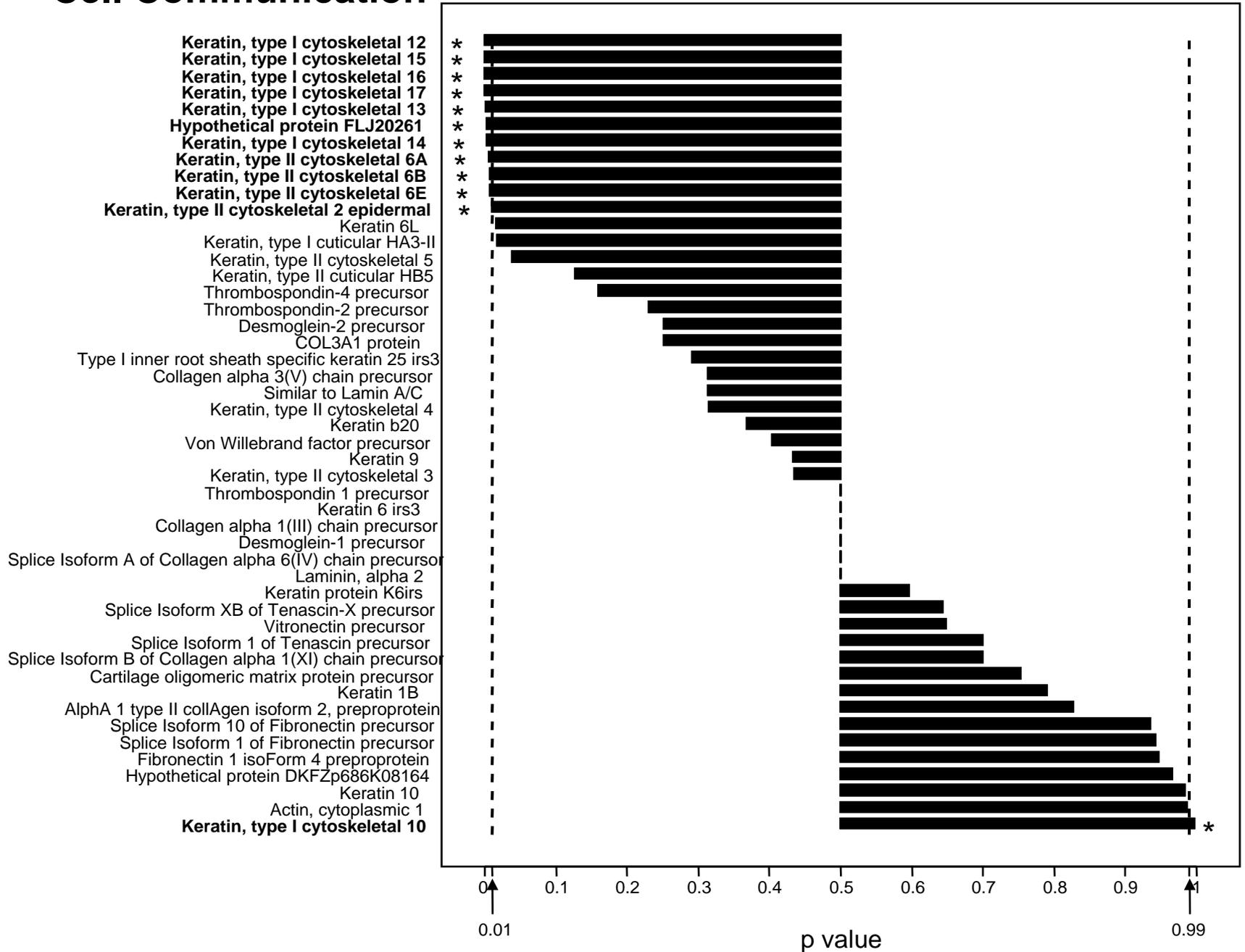


D

# Cell Communication

Enriched in diabetic serum

Enriched in non-diabetic serum

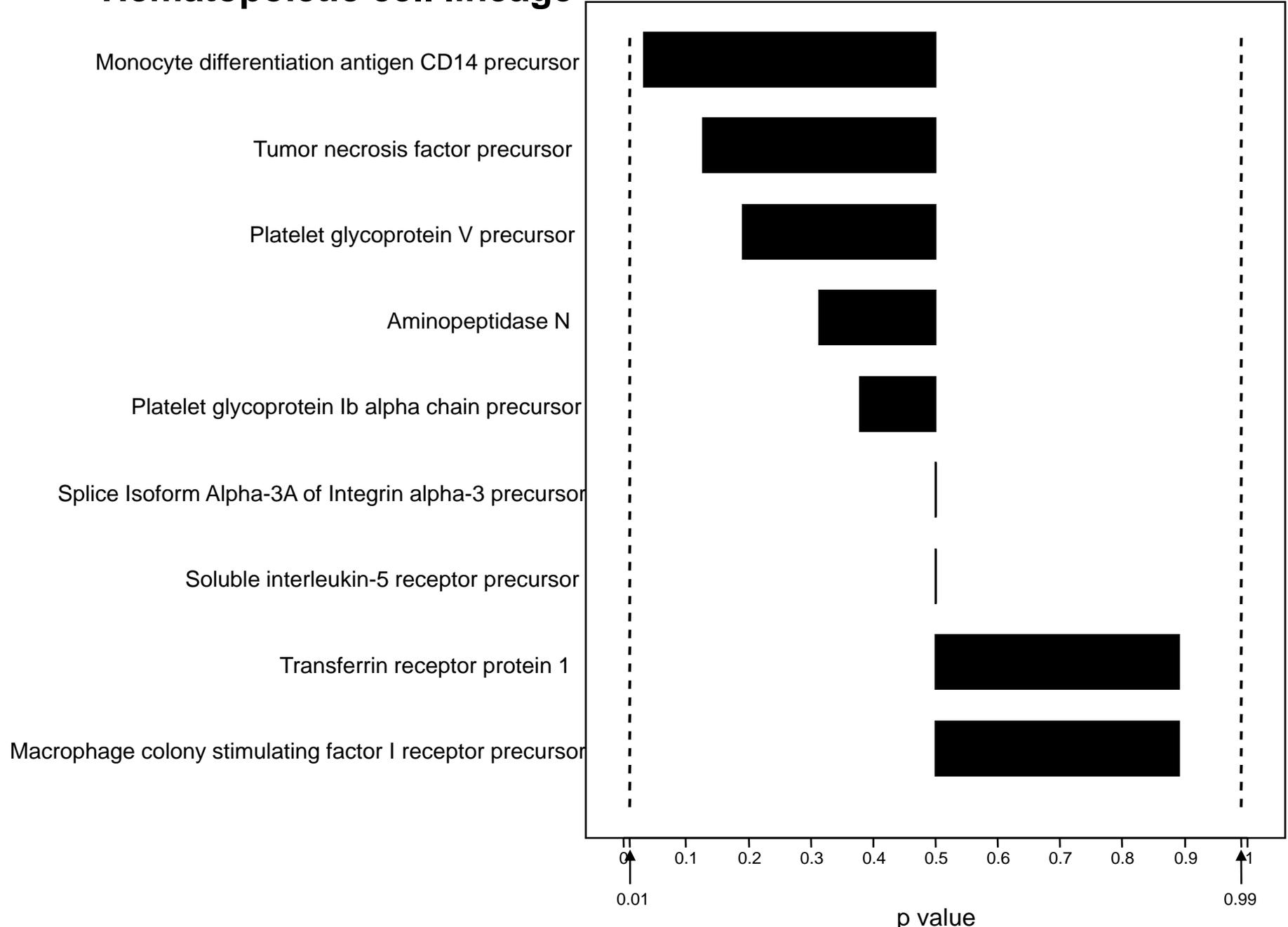


E

# Hematopoietic cell lineage

Enriched in diabetic serum

Enriched in non-diabetic serum

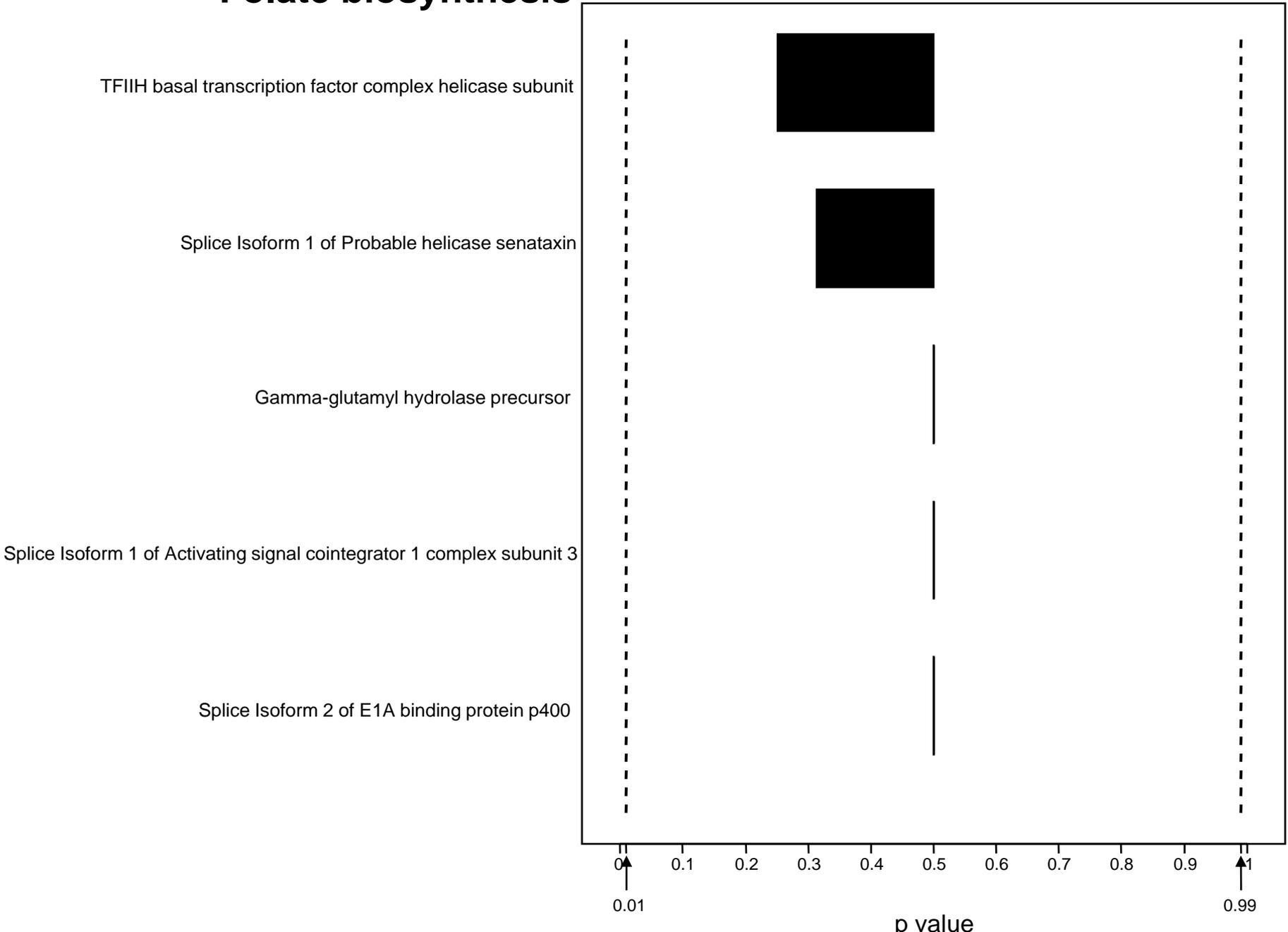


**F**

# Folate biosynthesis

Enriched in diabetic serum

Enriched in non-diabetic serum

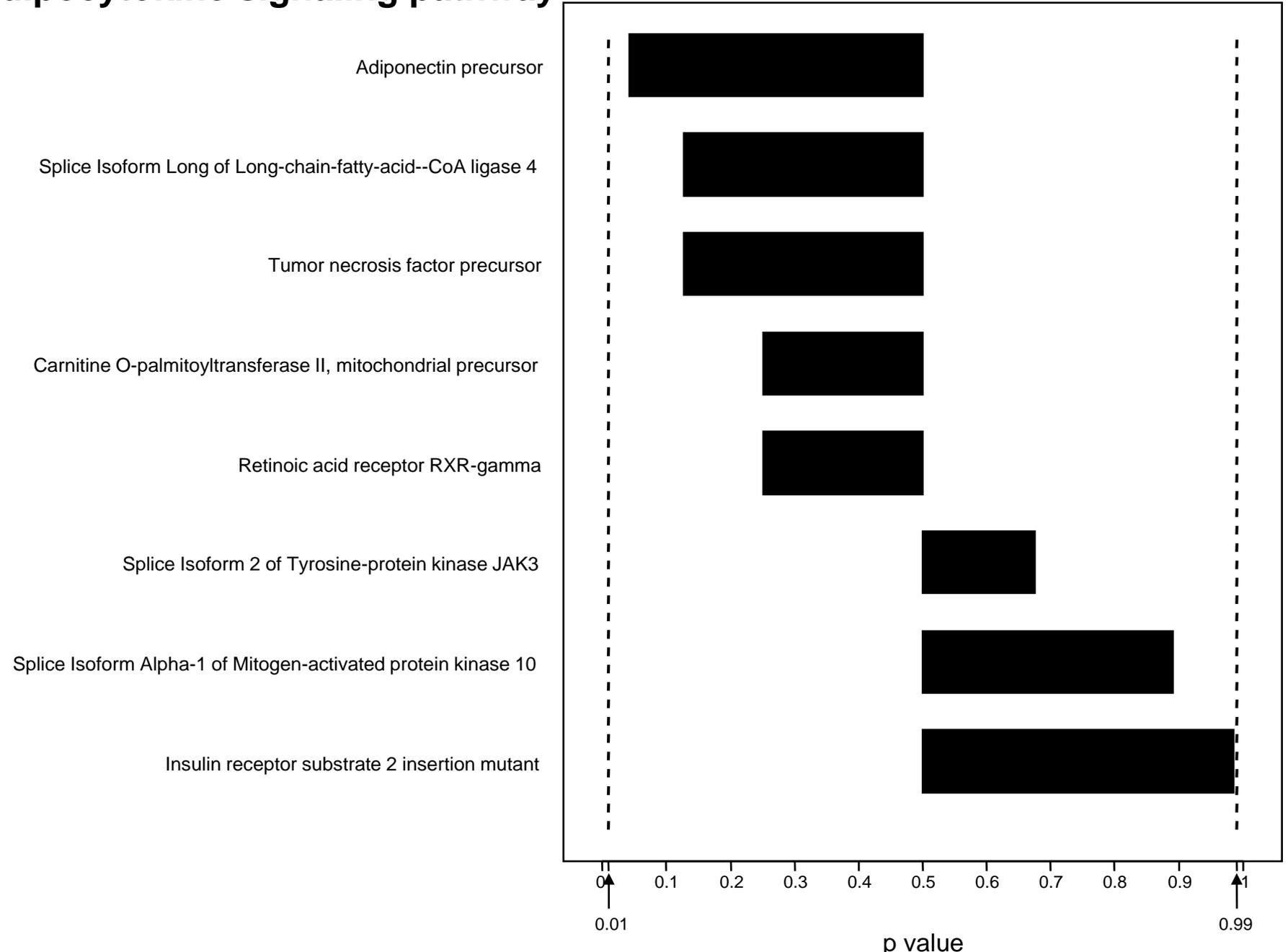


G

# Adipocytokine signaling pathway

Enriched in diabetic serum

Enriched in non-diabetic serum



H

# Inositol phosphate metabolism

Enriched in diabetic serum

Enriched in non-diabetic serum

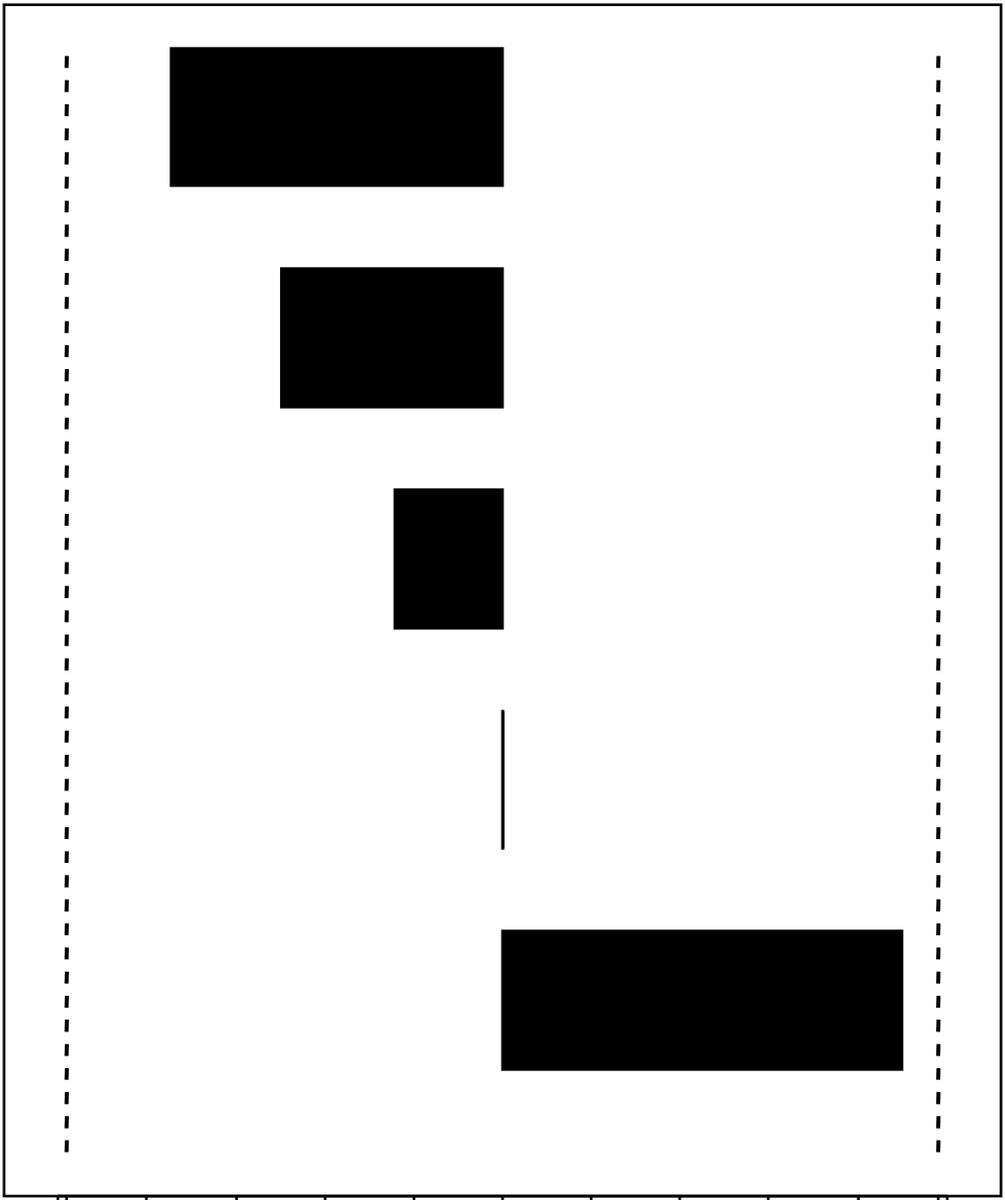
1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase delta 1

Inositol polyphosphate 5-phosphatase

Hypothetical protein PIK3CG

FYVE finger-containing phosphoinositide kinase

1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase beta 2



0

1

0.01

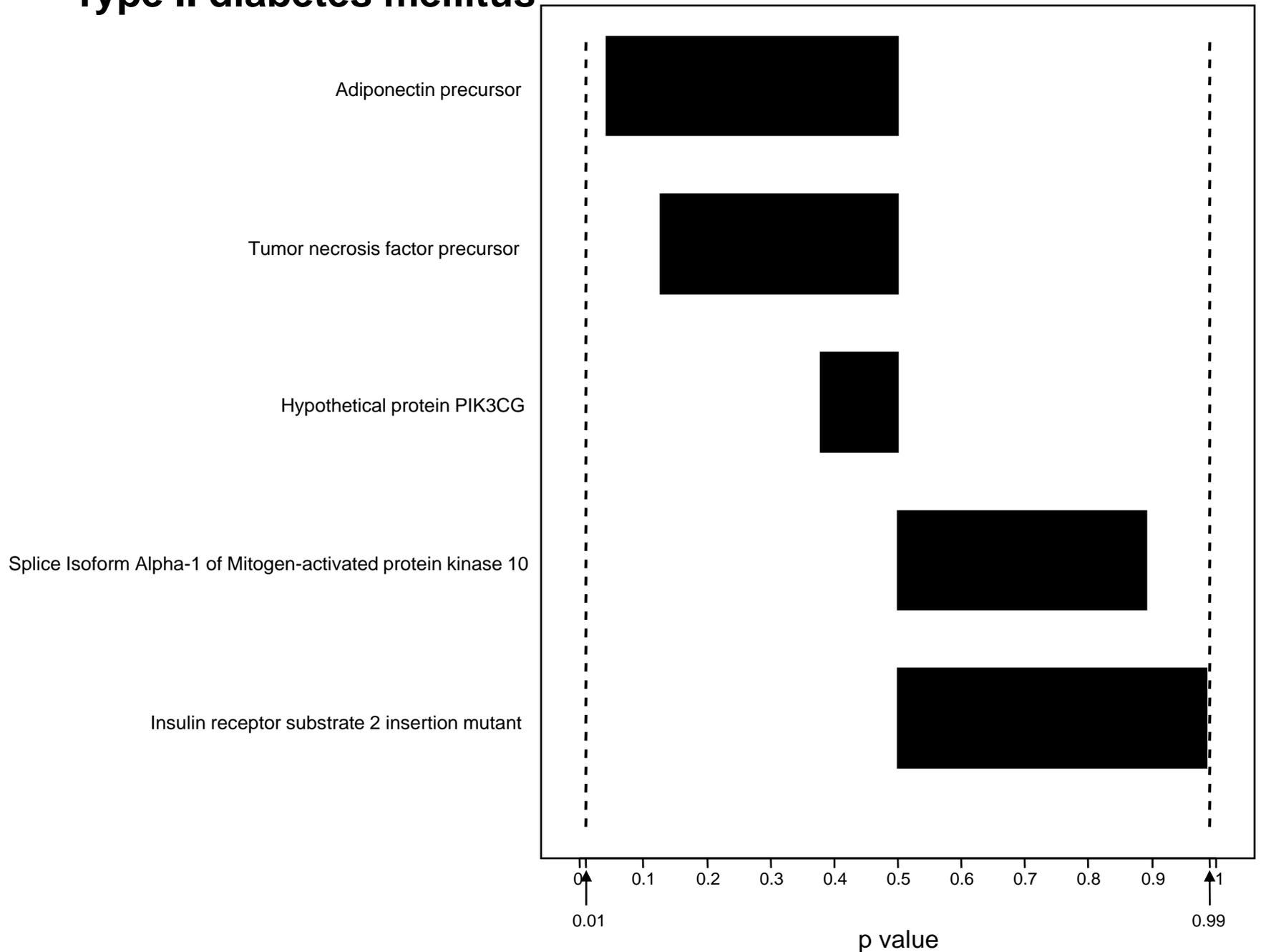
0.99

p value

# Type II diabetes mellitus

Enriched in diabetic serum

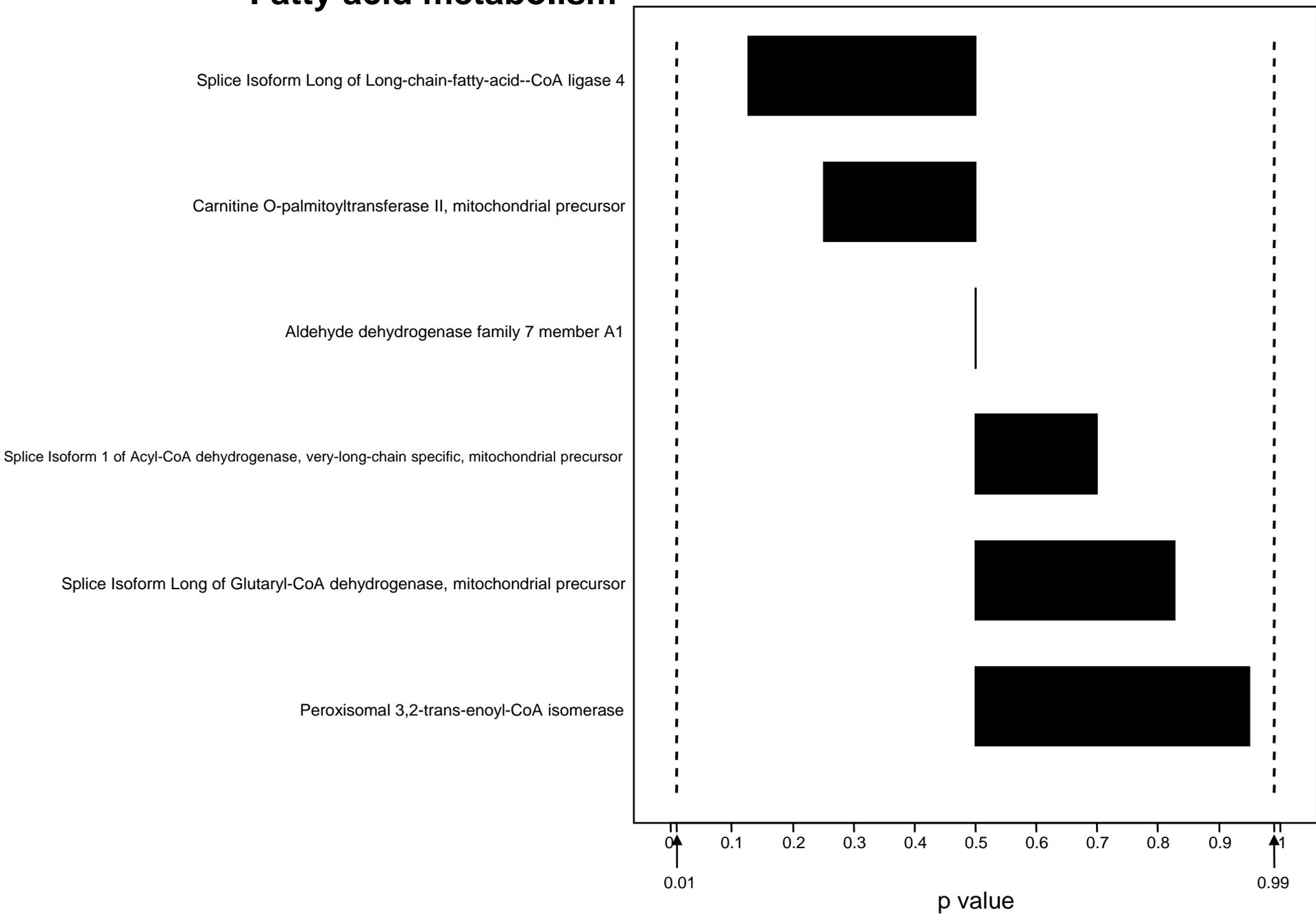
Enriched in non-diabetic serum



# Fatty acid metabolism

Enriched in diabetic serum

Enriched in non-diabetic serum

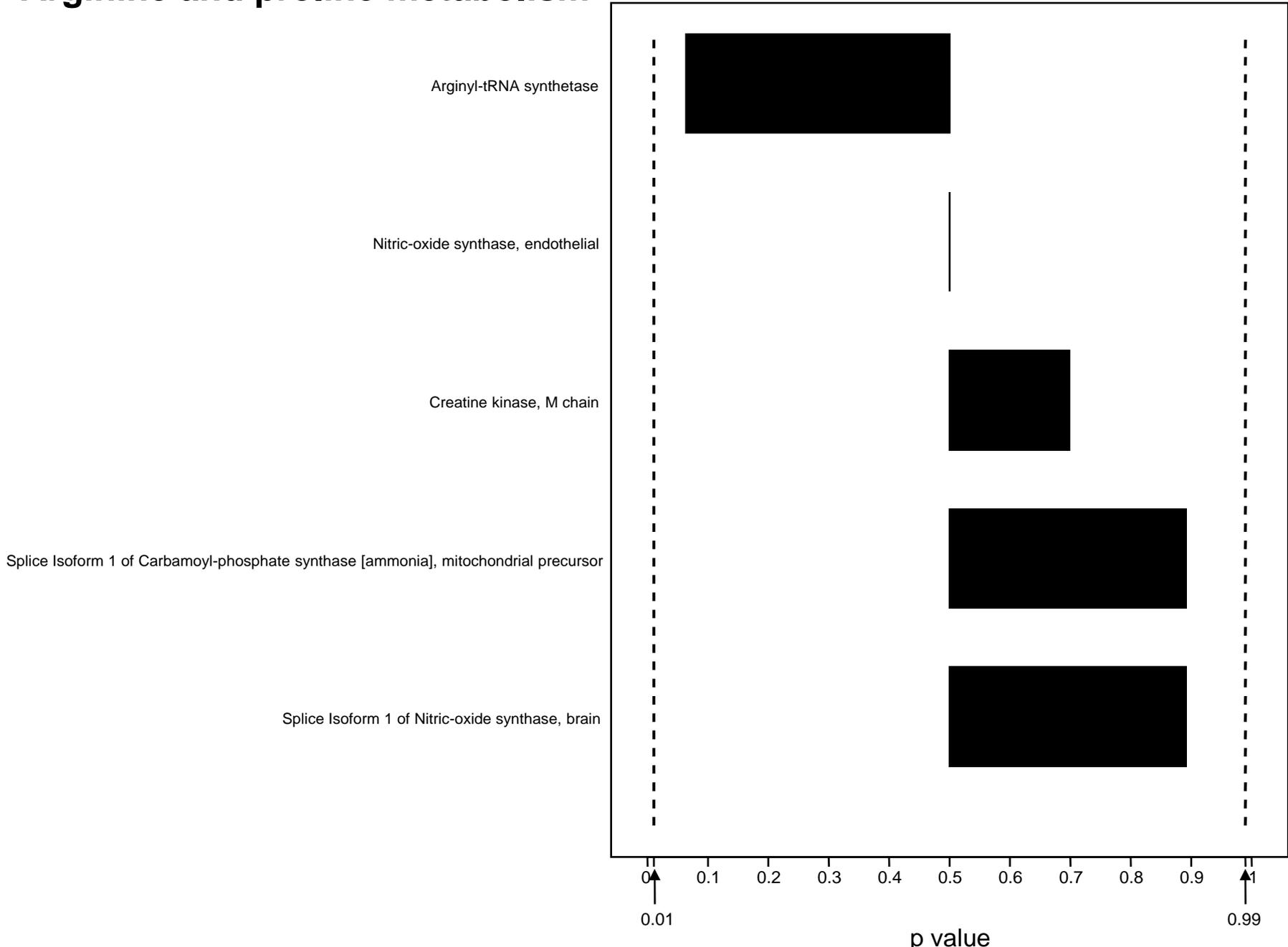


K

# Arginine and proline metabolism

Enriched in diabetic serum

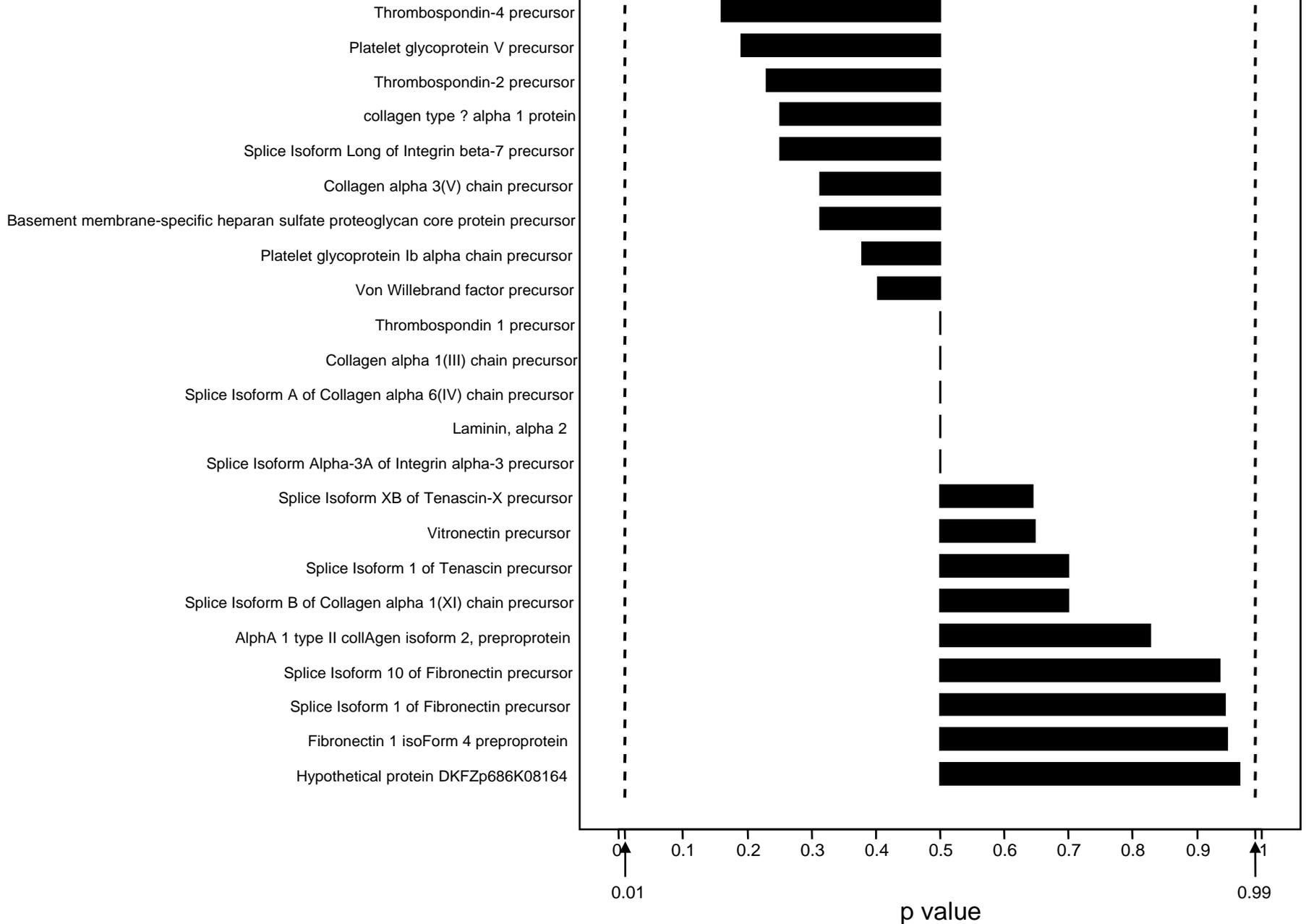
Enriched in non-diabetic serum



# ECM-receptor interaction

Enriched in diabetic serum

Enriched in non-diabetic serum

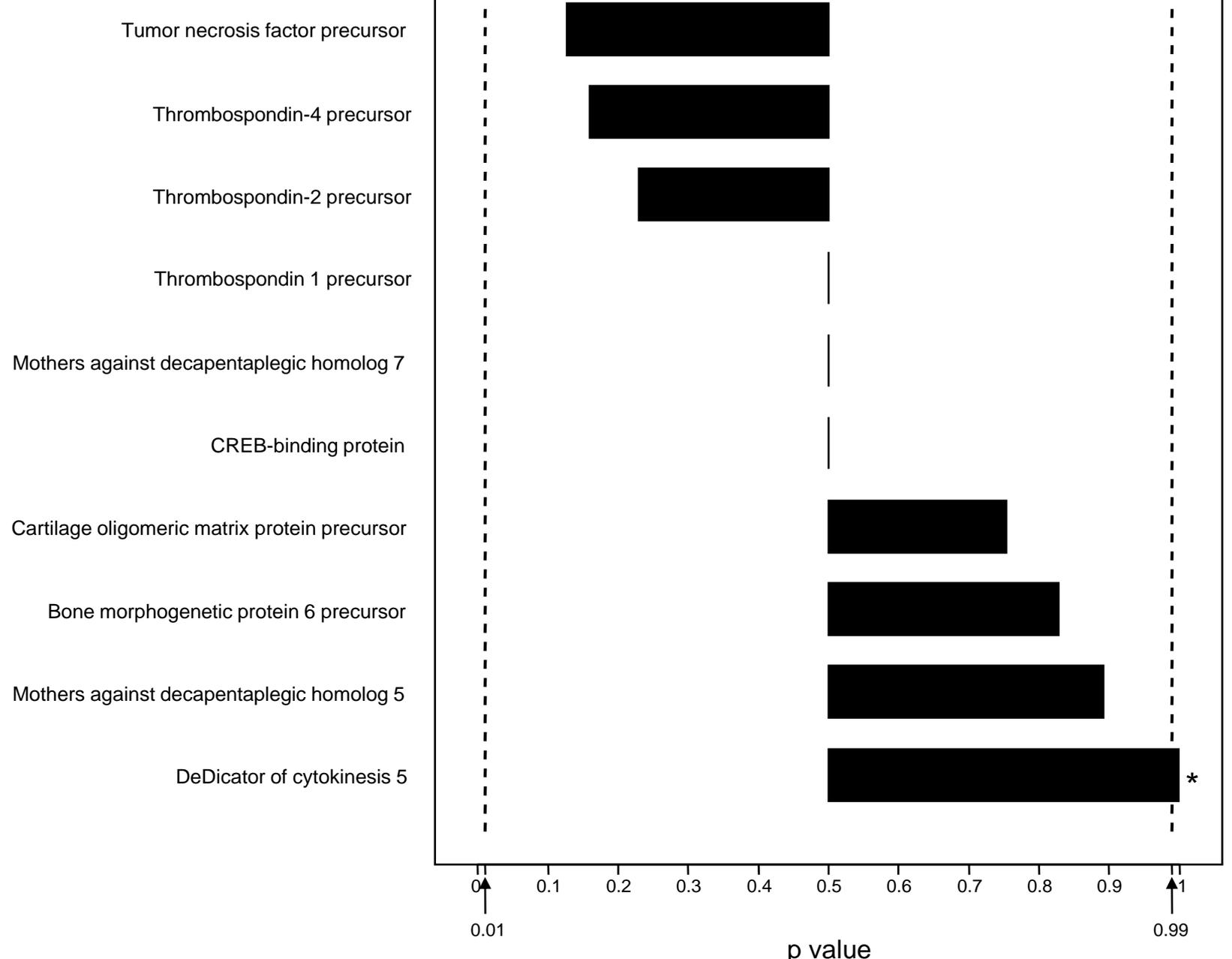


M

# TGF-beta signaling pathway

Enriched in diabetic serum

Enriched in non-diabetic serum

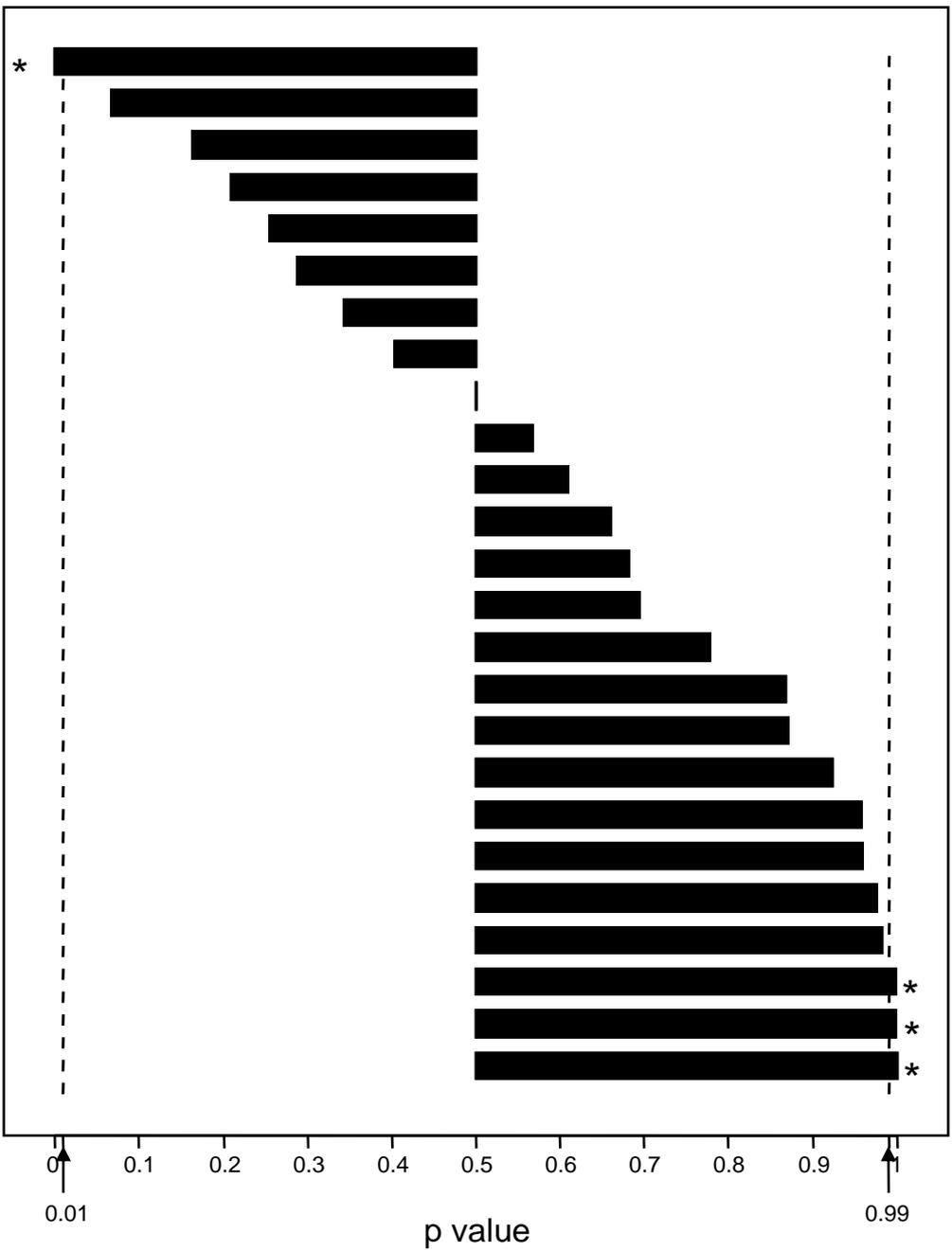


# Coagulation cascade

Enriched in diabetic serum

Enriched in non-diabetic serum

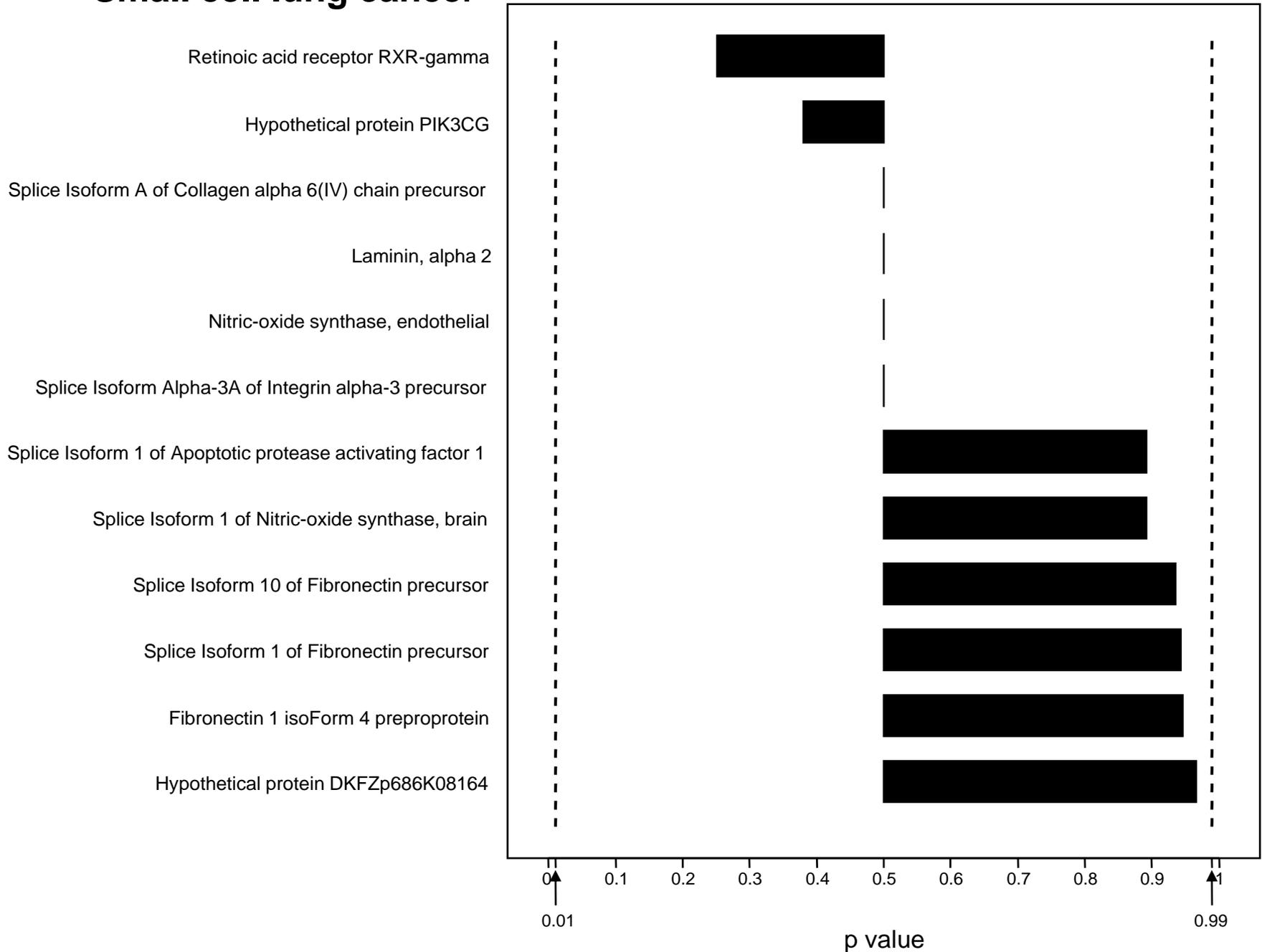
- Alpha-2-macroglobulin precursor** \*
- Splice Isoform 1 of Coagulation factor XI precursor
- Antithrombin III variant
- Plasma serine protease inhibitor precursor
- Vitamin K-dependent protein S precursor
- Heparin cofactor II precursor
- Coagulation factor X precursor
- Von Willebrand factor precursor
- Coagulation factor XIII A chain precursor
- Vitamin K-dependent protein C precursor
- Splice Isoform HMW of Kininogen precursor
- Splice Isoform LMW of Kininogen precursor
- Plasminogen precursor
- Coagulation factor XIII B chain precursor
- Alpha-1-antitrypsin precursor
- Splice Isoform Alpha-E of Fibrinogen alpha/alpha-E chain precursor
- Coagulation factor XII precursor
- Coagulation factor V
- Coagulation factor IX precursor
- Alpha-2-antiplasmin precursor
- Splice Isoform Gamma-B of Fibrinogen gamma chain precursor
- SERPINC1 protein
- Plasma protease C1 inhibitor precursor** \*
- Prothrombin precursor** \*
- Factor VII active site mutant immunoconjugate** \*



# Small cell lung cancer

Enriched in diabetic serum

Enriched in non-diabetic serum

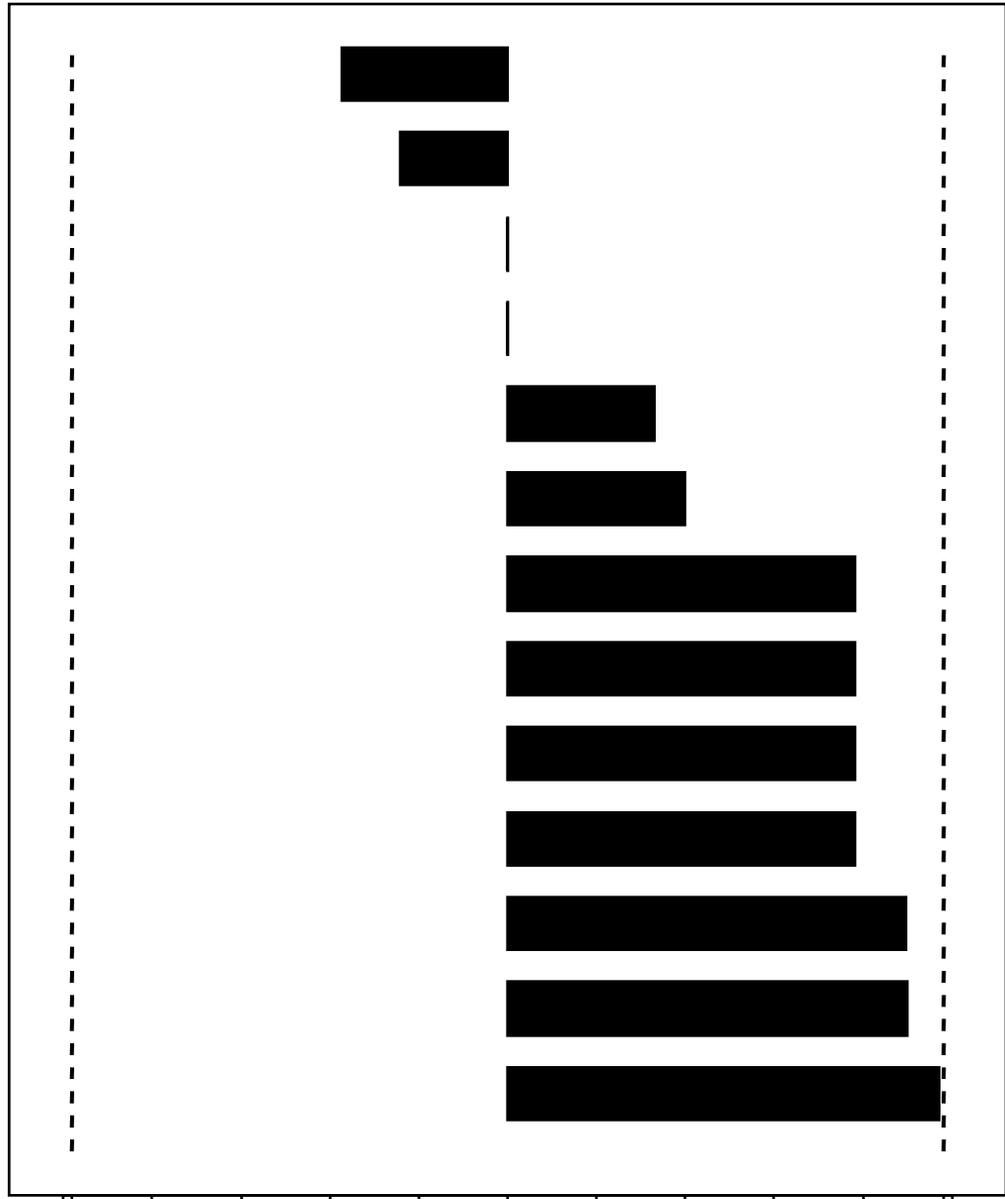


# Insulin signaling pathway

Enriched in diabetic serum

Enriched in non-diabetic serum

- cAMP-dependent protein kinase type II-beta regulatory subunit
- Hypothetical protein PIK3CG
- Similar to 6-phosphofructokinase, liver type
- SH2 containing inositol-5-phosphatase
- Fructose-1,6-bisphosphatase
- Sorbin and SH3 domain containing 1
- Forkhead box protein O1A
- Splice Isoform 1 of Tripartite motif protein 9
- Splice Isoform 1 of Phosphorylase b kinase alpha regulatory chain, skeletal muscle isoform
- Splice Isoform Alpha-1 of Mitogen-activated protein kinase 10
- Glycogen phosphorylase, muscle form
- Glycogen phosphorylase, brain form
- Insulin receptor substrate 2 insertion mutant



0.01 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0  
p value

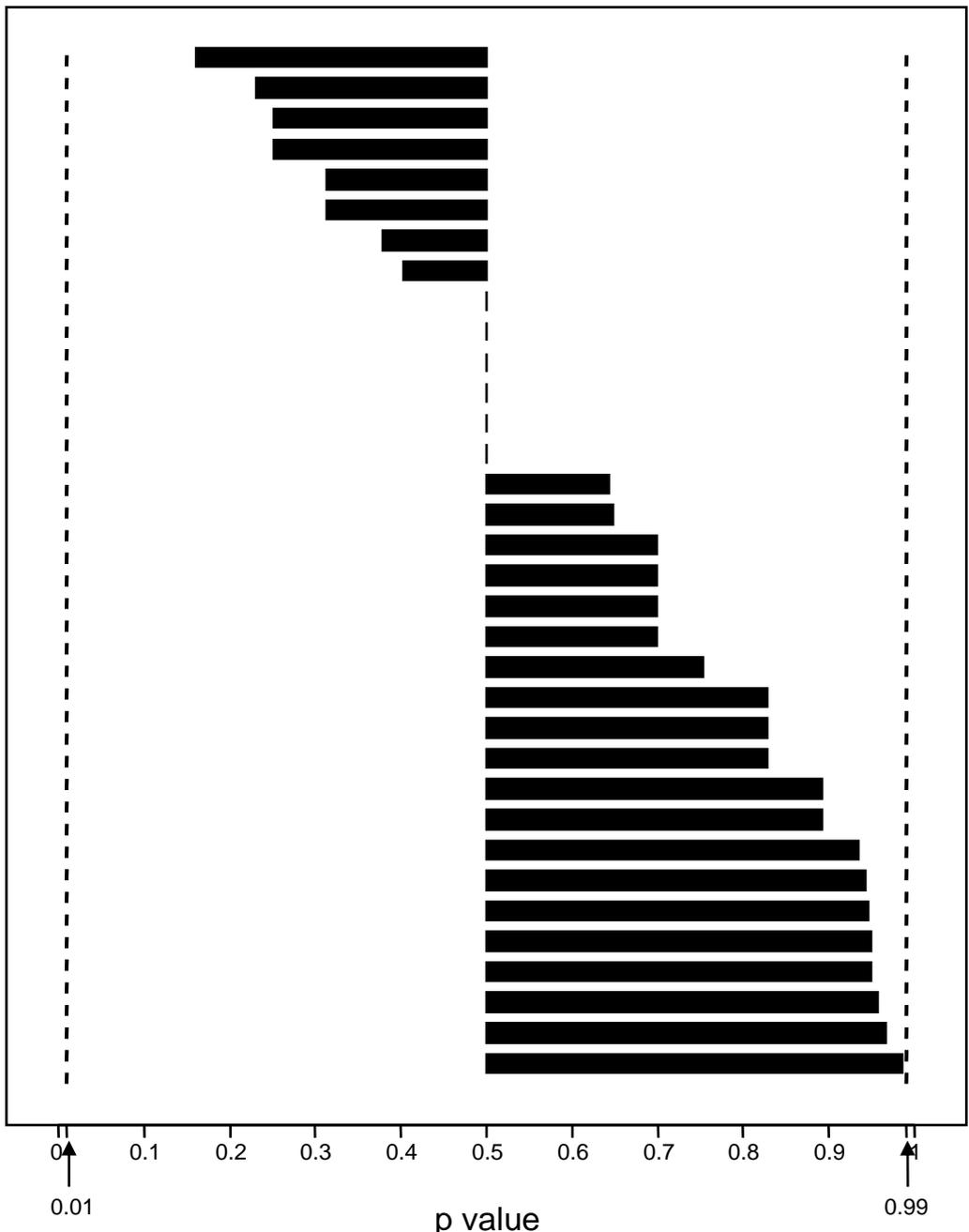
Q

# Focal adhesion

Enriched in diabetic serum

Enriched in non-diabetic serum

- Thrombospondin-4 precursor
- Thrombospondin-2 precursor
- collagen, type III, alpha 1 protein
- Splice Isoform Long of Integrin beta-7 precursor
- Collagen alpha 3(V) chain precursor
- FLJ00343 protein
- Hypothetical protein PIK3CG
- Von Willebrand factor precursor
- Thrombospondin 1 precursor
- Collagen alpha 1(III) chain precursor
- Splice Isoform A of Collagen alpha 6(IV) chain precursor
- Laminin, alpha 2
- Titin
- Splice Isoform Alpha-3A of Integrin alpha-3 precursor
- Splice Isoform XB of Tenascin-X precursor
- Vitronectin precursor
- Alpha-actinin 1
- Rho-GTPase-activating protein 5
- Splice Isoform 1 of Tenascin precursor
- Splice Isoform B of Collagen alpha 1(XI) chain precursor
- Cartilage oligomeric matrix protein precursor
- Splice Isoform 1 of Filamin C
- Alpha 1 type II collagen isoform 2, preproprotein
- Talin 2
- Splice Isoform Alpha-1 of Mitogen-activated protein kinase 10
- Insulin-like growth factor I receptor precursor
- Splice Isoform 10 of Fibronectin precursor
- Splice Isoform 1 of Fibronectin precursor
- Fibronectin 1 isoForm 4 preproprotein
- Titin
- TiTin isoform novex-1
- Titin, heart isoform N2-B
- Hypothetical protein DKFZp686K08164
- Actin, cytoplasmic 1



# Long term depression

Enriched in diabetic serum

Enriched in non-diabetic serum

