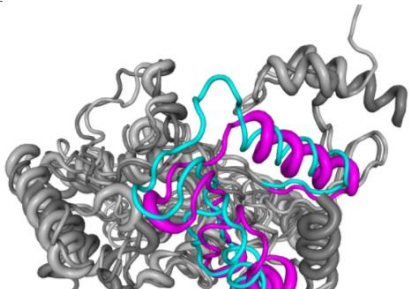


Interactive frontend for browsing networks of proteins sharing a theme

Themes, as in 'variations on a theme', is a database of amino acid segments of lengths between 35-200 amino acids, which are commonly found in proteins. [Show more](#)



(1) Push 'ECOD DOMAINS' button

ECOD: THEMES ECOD: DOMAINS

Domain View

Switch to Theme View

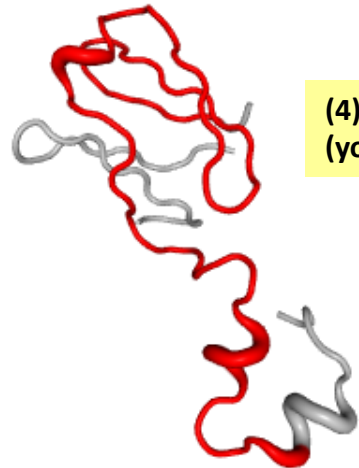
Search and filter:

(2) Enter domain e2de6A1

[e2de6A1](#)

(3) Follow hyperlink

You may move and resize the viewer window



(4) A molecular viewer (you can rotate it in 3D)

Hide Panel

Hide Panel

Available themes

Shift-click the checkboxes for multi-select. *Note: overlapping regions bear only one color.*

- e2de6A1 (11-65 OR 15-65 OR 18-65) Themes: [17516](#)
- e2de6A1 (15-139) Themes: [10819](#)
- e2de6A1 (15-139 OR 25-139 OR 29-130) Themes: [10814](#)
- e2de6A1 (27-126) Themes: [17135](#)
- e2de6A1 (27-62) Themes: [10816](#)


(6) Choose another theme (17135)

Switch to Theme View

Search and filter:

You may move and resize the viewer window

The viewer window can be moved



Notice the theme highlighted on the domain changed (shorter theme, and now in green, not red)

Hide Panel

Available themes

Shift-click the checkboxes for multi-select.

- e2de6A1 (11-65 OR 15-65 OR 18-65) Themes: [17516](#)
- e2de6A1 (15-139) Themes: [10819](#)
- e2de6A1 (15-139 OR 25-139 OR 29-130) Themes: [10814](#)
- e2de6A1 (27-126) Themes: [17135](#)
- e2de6A1 (27-62) Themes: [10816](#)

Domain View

Switch to Theme View

Search and filter:

Available themes

(5) Choose first theme (17516)

- e2de6A1 (11-65 OR 15-65 OR 18-65) Themes: [17516](#)
- e2de6A1 (15-139) Themes: [10819](#)
- e2de6A1 (15-139 OR 25-139 OR 29-130) Themes: [10814](#)
- e2de6A1 (27-126) Themes: [17135](#)
- e2de6A1 (27-62) Themes: [10816](#)

(7) Follow hyperlink 17135 to themes view

Theme view (theme 17135), representing the theme by a network: the nodes represent domains, and edges connect two aligned protein segments of the themes

Domain e2de6A1 ('X' classification: ISP-domain)

e2de6A1

(7) Left-click on the node: it will show the domain it represents with this theme highlighted, in the molecular viewer

e3gkeC2

e3gkqA2

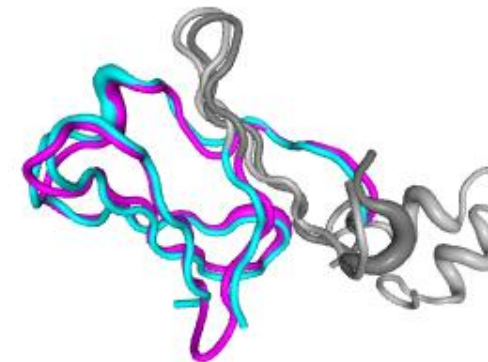
e3gkqE5

You may move and resize the viewer window

A molecular viewer (can rotate it in 3D) and move around the screen



a new window.



e2de6A1

e3gkeC2

(8) Left-click on the edge: it will show the two aligned segments from both domains at its endpoints, in the molecular viewer

The nodes of the network can be repositioned



(9) Right-click on node: it will open the domains view for this domain

Domain view (domain e3gkqA2): a list of all themes. The theme we were looking at is selected with a checkbox (17135), and highlighted in the molecular viewer

- e3gkqA2 (18-142) Themes: [10819](#)
- e3gkqA2 (28-142 OR 30-138) Themes: [10814](#)
- e3gkqA2 (30-129) Themes: [17135](#)
- e3gkqA2 (72-111 OR 72-112) Themes: [17508](#)
- e3gkqA2 (9-68 OR 18-68) Themes: [17516](#)

Domain View



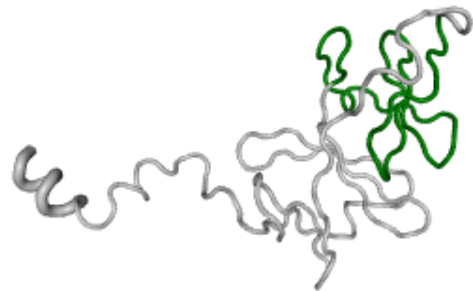
Domain view (domain e3gkqA2):

Hide Panel

Available themes

Shift-click the checkboxes for multi-select. *Note: overlapping re*

- e3gkqA2 (18-142) Themes: [10819](#)
- e3gkqA2 (28-142 OR 30-138) Themes: [10814](#)
- e3gkqA2 (30-129) Themes: [17135](#)
- e3gkqA2 (72-111 OR 72-112) Themes: [17508](#)
- e3gkqA2 (9-68 OR 18-68) Themes: [17516](#)



Domain View

(10) Choose another theme (17508):
it will highlight it (in green) in the
molecular viewer

Available themes

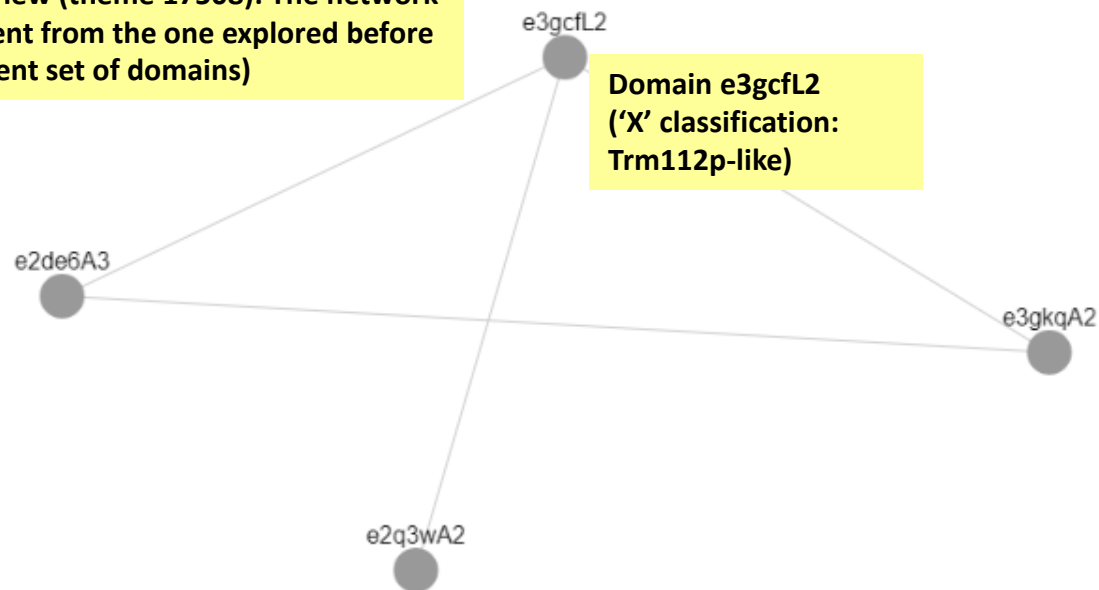
Shift-click the checkboxes for multi-select. *Note: overlapping re*

- e3gkqA2 (18-142) Themes: [10819](#)
- e3gkqA2 (28-142 OR 30-138) Themes: [10814](#)
- e3gkqA2 (30-129) Themes: [17135](#)
- e3gkqA2 (72-111 OR 72-112) Themes: [17508](#)
- e3gkqA2 (9-68 OR 18-68) Themes: [17516](#)

(11) Follow hyperlink to see
theme view of theme 17508

Domain View

Theme view (theme 17508): The network
is different from the one explored before
(a different set of domains)



Explore more at:

[http://trachel-srv.cs.haifa.ac.il/
rachel/ppi/themes/](http://trachel-srv.cs.haifa.ac.il/rachel/ppi/themes/)