

**Table S1 - Summary of functional specialization in the central zones of human signalling network.**

| Percentage of proteins  |        |        |        |        |
|-------------------------|--------|--------|--------|--------|
| Enriched Pathway        | Zone 1 | Zone 2 | Zone 3 | Zone 4 |
| Signal transduction     | 40.6%  | 21.1%  | 9.3%   | 16%    |
| Immune system           | 33.6%  | 16.2%  | 8.4%   | -      |
| MAPK signalling pathway | 28.9%  | 3.5%   | -      | -      |
| Pathway in cancer       | 21.4%  | 5.7%   | -      | -      |
| Disease                 | 21%    | 10%    | 7.2%   | 9.8%   |
| Hemostasis              | 16.5%  | 6.9%   | 3.3%   | -      |
| Cell Cycle              | 5.3%   | 7.6%   | 3.4%   | -      |
| Gene expression         | 7.2%   | 7.5%   | 8.7%   | -      |
| Metabolism of proteins  | -      | 4.6%   | 4.6%   | -      |
| Membrane trafficking    | -      | 2%     | -      | 4.4%   |