

# P<sup>3</sup> DB user's manual

## V 1.0

### 1. Home

The main statistics of the database, the P3DB news and events are listed.

### 2. Search

#### 2.1 Protein

Search directly for phosphoproteins and phosphopeptides, or blast the phosphoproteins and phosphopeptides.

#### 2.2 PPI

PPI is searched by protein ID list. The results will lead to a network display.

#### 2.3 Kinase

Search by Kinase/Phosphatase names or families.

#### 2.4 Ontology

Support the search of molecular function, cellular component, and biological process, by the gene ontology IDs, names or descriptions.

#### 2.5 Taxonomy

Search the green plants species.

#### 2.6 Domain

The domain search is based on the Pfam definition of the domain IDs. The domain network is also ready to be searched.

### 3. Browse

#### 3.1 Data Sets and Organism

Both the data sets and the organism information can be browsed.

#### 3.2 Kinase/Phosphatase

The Kinase/Phosphatase family name is ready to be searched.

## **4. Tool**

### 4.1 PPI

Search by PPI or span the nodes through neighborhood.

### 4.2 Domain co-occurrence network

It supports the searching by the domain name or ID. The search results will be displayed in a network view.

### 4.3 Kinase-substrate/Phosphatase substrate networks

Unlike PPI, these are directed graphic models.

## **5. Data**

### 5.1 Download

Download our data from any pieces in four different data formats.

### 5.2 Upload

Follow the data processing steps, and the uploaded data are going to the user specific architecture.

## **6. Information**

### 6.1 Help

Submit the questions in terms of the website application or functionalities.

### 6.2 Contribute

Contribute to P3DB by suggesting data sets or sharing ideas.

### 6.3 Events

The ongoing or finished events are listed.