

## Database model documentation

# Table of contents

<b>1. Model details</b>	<b>3</b>
<b>2. Tables</b>	<b>4</b>
1.1. Table FUNCTION	4
1.2. Table PROTEIN	4
1.3. Table R_PROTEIN_FUNCTION	5
1.4. Table R_PROTEIN_MODELVPF	5
1.5. Table INTERACTION	5
1.6. Table SPECIES	5
1.7. Table VPFMODEL	6
<b>3. References</b>	<b>7</b>
2.1. Reference FK_PROTEIN_SPECIES	7
2.2. Reference FK_R_PROTEIN_FUNCTION_FUNCTION	7
2.3. Reference FK_R_PROTEIN_FUNCTION_PROTEIN	7
2.4. Reference FK_R_PROTEIN_MODELVPF_PROTEIN	7
2.5. Reference FK_INTERACTION_PROTEINH	7
2.6. Reference FK_INTERACTION_PROTEINV	7
2.7. Reference R_PROTEIN_MODELVPF_VPFMODEL	7

# 1. Model details

**Model name:**

Database\_TFG

**Version:**

2.3

**Database engine:**

PostgreSQL

**Description:**

## 2. Tables

### 2.1. Table FUNCTION

#### 2.1.1. Columns

Column name	Type	Properties	Description
idFunction	serial	PK	
code	varchar(15)		
description	text		
aspect	varchar(100)	null	

#### 2.1.2. Alternate keys

Key name	Columns	Description
FUNCTION_codeG0_uk	code	

### 2.2. Table PROTEIN

#### 2.2.1. Columns

Column name	Type	Properties	Description
idProtein	serial	PK	
code	varchar(15)		
name	varchar(100)		
gene	varchar(50)	null	
location	text	null	
idSpecies	serial		

#### 2.2.2. Alternate keys

Key name	Columns	Description
PROTEIN_code_uk	code	

#### 2.2.3. Indexes

Index name	Columns	Description
protein_idSpecies_index	idSpecies (ASC)	

## 2.3. Table R\_PROTEIN\_FUNCTION

### 2.3.1. Columns

Column name	Type	Properties	Description
idProtein	integer	PK	
idFunction	integer	PK	

## 2.4. Table R\_PROTEIN\_MODELVPF

### 2.4.1. Columns

Column name	Type	Properties	Description
idProtein	serial	PK	
idModel	serial	PK	
score	float	null	
e_value	float	null	

## 2.5. Table INTERACTION

### 2.5.1. Columns

Column name	Type	Properties	Description
idProteinV	serial	PK	
idProteinH	serial	PK	

## 2.6. Table SPECIES

### 2.6.1. Columns

Column name	Type	Properties	Description
idSpecies	serial	PK	
name	varchar(100)		
taxonomy	varchar(100)		
isVirus	boolean		

### 2.6.2. Alternate keys

Key name	Columns	Description
SPECIES_name_uk	name	

## 2.7. Table VPFMODEL

### 2.7.1. Columns

Column name	Type	Properties	Description
idModel	serial	PK	
code	varchar(100)		
path	varchar(500)		

### 2.7.2. Alternate keys

Key name	Columns	Description
VPFMODEL_code_uk	code	

## 3. References

### 3.1. Reference FK\_PROTEIN\_SPECIES

SPECIES	0..*	PROTEIN
idSpecies	<->	idSpecies

### 3.2. Reference FK\_R\_PROTEIN\_FUNCTION\_FUNCTION

FUNCTION	0..*	R_PROTEIN_FUNCTION
idFunction	<->	idFunction

### 3.3. Reference FK\_R\_PROTEIN\_FUNCTION\_PROTEIN

PROTEIN	0..*	R_PROTEIN_FUNCTION
idProtein	<->	idProtein

### 3.4. Reference FK\_R\_PROTEIN\_MODELVPF\_PROTEIN

PROTEIN	0..*	R_PROTEIN_MODELVPF
idProtein	<->	idProtein

### 3.5. Reference FK\_INTERACTION\_PROTEINH

PROTEIN	0..*	INTERACTION
idProtein	<->	idProteinH

### 3.6. Reference FK\_INTERACTION\_PROTEINV

PROTEIN	0..*	INTERACTION
idProtein	<->	idProteinV

### 3.7. Reference R\_PROTEIN\_MODELVPF\_VPFMODEL

VPFMODEL	0..*	R_PROTEIN_MODELVPF
idModel	<->	idModel