Genic Interaction Extraction Challenge
Data Format

1 File Structure

The LLL format provides a representation of PubMed sentences. It consists of the following fields (one field by line) :

- ID : unique identifier of the Pubmed abstract that contains the sentence and the sentence number
- sentence : the original sentence
- words : sequence of the sentenceś words
- agents : list of the agents of the genic interactions
- targets : list of the targets of the genic interactions
- genic_interactions : list of the interactions described in the sentence.

2 Field Structure

A tab separates each element of a field :

ID

The ID field contains the abstract's PubMed ID which the sentence is extracted from and it contains the sentence number in this abstract.

ID	(tabulation)	11011148-1

SENTENCE

This field contains the sentence.

sentence	(tabulation)	ykuD was transcribed by SigK RNA polymerase from T4 of sporulation.

WORDS, AGENTS, TARGETS, GENIC_INTERACTIONS

Other fields are organised according to the following format :

Field_Name	(tabulation)	predicate1(argument1_1,argument1_2,...)
	(tabulation)	predicate2(argument2_1,argument2_2,...)
	(tabulation)	...

EXAMPLE WORDS

words	word(0,'ykuD',0,3) word(1,'was',5,7) word(2,'transcribed',9,19) word(3,'by',21,22) word(4,'SigK',24,27) word(5,'RNA',29,31) word(6,'polymerase',33,42) word(7,'from',44,47) word(8,'T4',49,50) word(9,'of',52,53) word(10,'sporulation',55,65)

3 Predicate Description

WORD

The predicate "word" refers to a word of the sentence and accepts four arguments : **word(id_word,'string_word',char_word1,char_word2)**

id_word	integer, unique word id
string_word	string, the actual word
char_word1	integer, position of the first character in the sentence (starting at 0)
char_word2	integer, position of the last character in the sentence (starting at 0)

AGENT

The predicate "agent" refers to the agent of the genic interaction. It accepts one argument : **agent(id_word)**

id_word	integer, id of the word the agent refers to

TARGET

The predicate "target" refers to the target of the genic interaction. It accepts one argument : **target(id_word)**

id_word	integer, id of the word the target refers to

GENIC_INTERACTION

The predicate "genic_interaction" refers to an interaction between an agent and a target : **genic_interaction(id_word1,id_word2)**

id_word1	integer, id of the word the agent refers to
id_word2	integer, id of the word the target refers to

4 Example

ID	11011148-1
sentence	ykuD was transcribed by SigK RNA polymerase from T4 of sporulation.
words	word(0,'ykuD',0,3) word(1,'was',5,7) word(2,'transcribed',9,19) word(3,'by',21,22) word(4,'SigK',24,27) word(5,'RNA',29,31) word(6,'polymerase',33,42) word(7,'from',44,47) word(8,'T4',49,50) word(9,'of',52,53) word(10,'sporulation',55,65)
agents	agent(4)
targets	target(0)
genic_interactions	genic_interaction(4,0)