General model information (FHGGKU7KI6)				0	
Edit	Value			Description	
ID	BZR			Model identifier	
Version	Development 27			Version of the model	
Contact		Karolina Kopanska (karolinaweronika.kopanska@upf.edu)  Model identifier  Universitat Pompeu Fabra (UPF). Research Program on Biomedical Informatics (GRIB), PharmacoInformatics group (Phi)  Affiliation details			
Institution Date	22.07.2020	22.07,2020 Date of model development			
Endpoint	Allosteric modulation of benzodia			Endpoint modeled	
Endpoint units Interpretation	Class prediction (active or inactive Benzodiazepine receptors are allo	re) osteric modulatory sites on GABAA receptors. The effect of the benzodiazepine rec	ceptor modulation is the potentiation of the	Response units to model Interpretation of the model	
	neural inhibition that is mediated physiological effect on the recept	neural inhibition that is mediated by gamma-aminobutyric acid (GABA). The BZR model classifies substances as active or inactive, thereby predicting their physiological effect on the receptor. A positive result indicates that the particular substance was classified as BZR modulator.			
Dependent variable Species	Activity class membership			Response variable used to model  Modeled endpoint species	
Limits applicability				Applicability limits of the model	
Experimental protocol				Description of the followed experimental protocol	
Model availability	description		Additional information	Information about model availability	
	license location		Model license specifications Model URL/place		
Data info	format	SDF	Format used (SDF, SMILES, table)	Model data resources	
	pre-procesing	Mol blocks were computed from SMILES using RDKit.Chem	Details on data processing		
	raw data url test set size	https://pubs.acs.org/doi/suppl/10.1021/ci5001168/suppl_file/ci5001168_si_00	1.xlsx URL of the original data Size of the test set		
	test set url		Test set URL		
	training set size training set url	130	Size of the training set Training set URL		
	training set un		Halling Set OIL		
Algorithm and software				•	
Edit	Value			B	
	Value	NIM	The second secon	Description	
Algorithm	algorithm	SVM	Type of algorithm (Random Forest, SVM, etc)	Description of the algorithm	
	descriptors	RDKit_properties	Name of descriptor package/s used		
	type	OSAR	Type of model (QSAR, RA, etc)		
Software	applicability domain		Applicability domain software, version, description and license.	Description of the used software	
	descriptors	RDKit	Software used to generate		
			descriptors, version, description and license		
	model	Flame	Main modelling program, version,		
			description and license.		
Descriptors	descriptors final number	25	Descriptors used, list Final number of descriptors after	Information on descriptors used for the model	
	Titla Huttives	20	feature selection		
	initial number ratio	0.19	Initial number of descriptors		
	selection	0.19	Ratio samples/descriptors Final list of descriptors used		
	selection method		Feature selection technique		
Algorithm settings	C	1	na	Algorithm parameters information	
	break ties cache size	false	na na		
	class weight	200	na		
	coef0	0	na		
	decision function shape degree	ovr 3	na na		
	gamma	auto	na		
	kernel max iter	rbf -1	na na		
	probability	true	na		
	random state shrinking	46 true	na		
	tol	0.001	na na		
	verbose	false	na		
AD method	description	Adding conformal features to the classifier guarantees both, a certain le of confidence and a maximum frequency of errors (misclassifications) which will be committed by the conformal predictor. The given confiden level opposes the error rate which represents the level of uncertainty th must initially be accepted and provided by the user. Conformal accuracy indicates the fraction of correct predictions at the given confidence leve Conformal coverage is the fraction of substances for which valid predictions were generated at the required confidence level.	domain technique ce at	Applicability domain technique details	
	name	conformal prediction	Name of the applicability domain technique		
AD parameters	confidence	0.8	Conformal confidence (from 0 to 1)	Parameters of the applicability	
				domain technique	
Goodness of fit statistics	Specificity MCC	0.83 0.61	na na	Goodness of fit statistics	
Internal validation 1		0.79		Internal validation method and	
internal validation i	Conformal coverage Conformal accuracy	0.79	na na	statistics for internal cross-	
Internal validation 2				validation AdditionI validation settings and	
				statistics for internal cross- validation	
External validation  Comments				External validation statistics Additional commnents on model building	
Other information				0	
Edit	Volue			p. december 1	
Other related models	Value			Description Related models	
Date of QMRF				Date of QMRF, usually is the same as	
Date of QMRF updates				the model creation  Dates of document updates	
OMRF updates				Update of the QMRF	
References				Reference(s) to main scientific	
QMRF same models				papers and/or software package Availability of another QMRF for	
Comment on the endpoint				exactly the same model Additional comments on the	
				modeled endpoint	
Endpoint data quality and variability				Text field containing all the information for adequately judge the quality of the experimental data.	
Descriptor selection				Detailed information about descriptor selection process	