

RESEARCH

Substructure-based Neural Machine Translation for Retrosynthetic Prediction

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Abstract

Keywords: retrosynthesis planning; machine neural translation; seq-to-seq; attention

Additional Files as Figures.

Please find the supporting materials as **figures** within the "Additional Files" section of the BMC article.

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References**Additional Files****Additional File 3 : Figure S2**

File name : Supplementary Figure S2

Title of data : 1-bit keys

File format : Standard Latex figure, formatted as PNG.

Description of data : Examples to molecules that are represented with only one bit.








Lettered Key	MACCS Key	SMARTS Pattern	SMARTS Visual	Corresponding Molecules (SMILES)
'Wz' : '17' :		'[#6]#[#6]'		'C#C', '[C-]#[C-]', 'C#CBr'
'Mx' : '88' :		'[#16]'		'S', '[S-2]', '[SH-]'
'dz' : '99' :		'[#6] = [#6]'		'FC=C[SnH3]', 'BrC=CBr', 'Cl/C=C\Cl'
'ox' : '106' :		'[!#6;!#1] ~ *(~ [!#6;!#1]) ~ [!#6;!#1]'		'ClC(Cl)Cl', 'BrC(Br)Br', 'FC(F)Cl', 'FC(Cl)Cl', '[SiH3]C(Cl)Cl', 'IC(I)I'
'ix' : '124' :		'[!#6;!#1] ~ [!#6;!#1]'		'ClCl', 'BrBr', 'II', 'FF', '[Se-][Se-]', 'ClI', 'BrI', 'ClBr'
's' : '160' :		'[C;H3,H4]'		'C', 'CC(Cl)Cl', 'CC(Br)Br', 'CC(F)Br', 'CC(Cl)Br'
't' : '164' :		'[#8]'		'[O-2]'

Figure S2: Molecules that are represented with only one bit in the double reactant dataset are given as SMILES strings.