

Non-steroidal Anti-inflammatory Drugs (NSAID)

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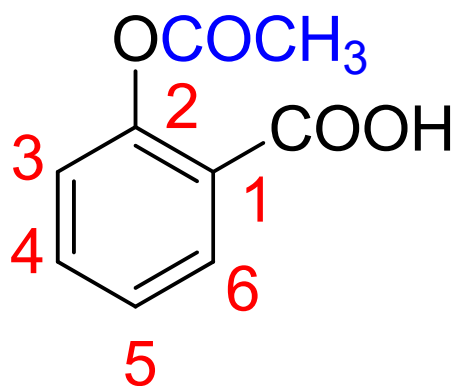
04-03-2021

Definition:

- NSAID are agents which selectively relieves pain and inflammation.
- They also possess antipyretic properties.
- These are mild analgesics, relieve minor pain such as head ache by acting through peripheral pain mechanism.

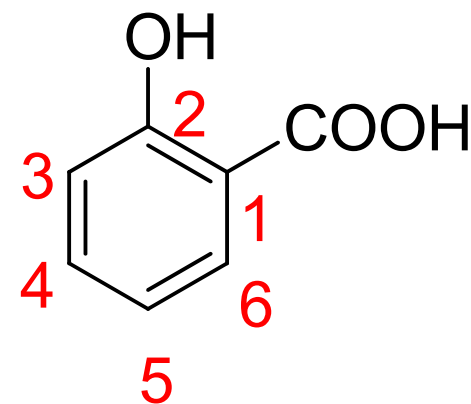
Classification

Salicylic acid derivatives

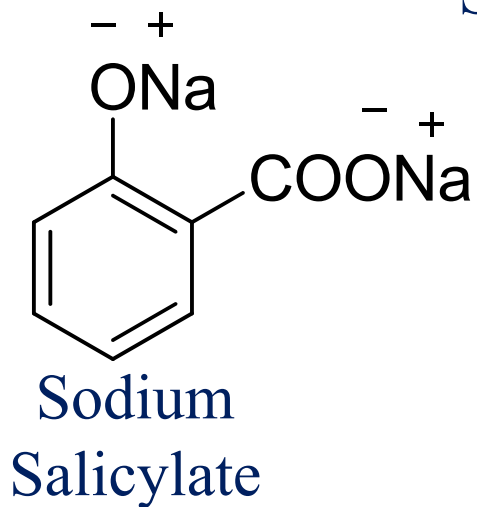


Aspirin

IUPAC: **Acetylsalicylic acid**

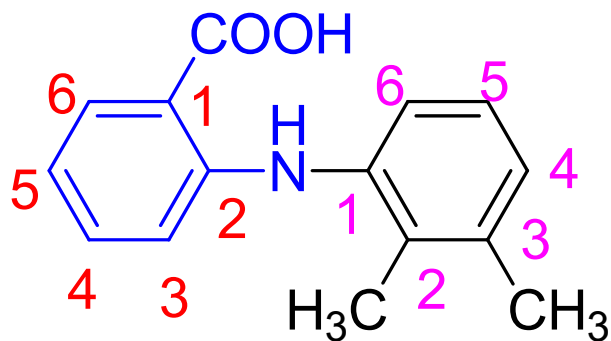


Salicylic acid



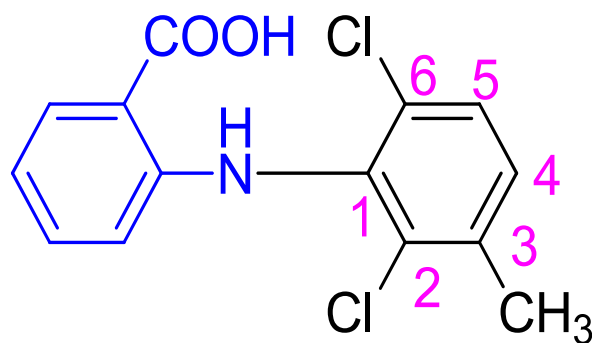
Sodium Salicylate

N-Arylanthranilic acid derivatives



Mefenamic acid

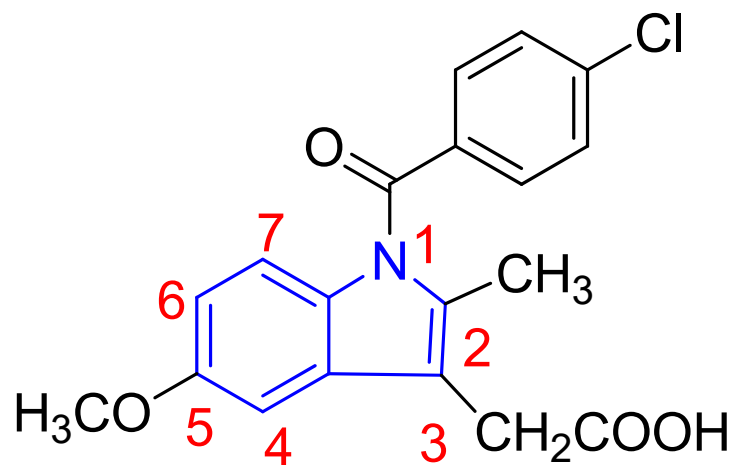
IUPAC: **N-(2,3-xilyl)anthranilic acid**



Meclofenamic acid

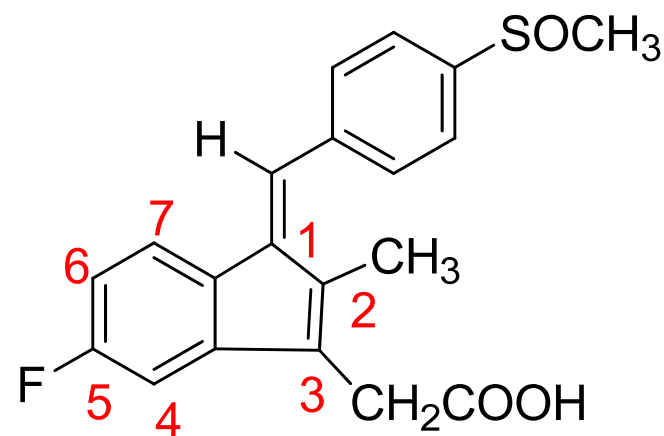
IUPAC: **N-(2,6-dichloro-m-tolyl)anthranilic acid**

Heteroarylacetic acid derivatives



Indomethacin

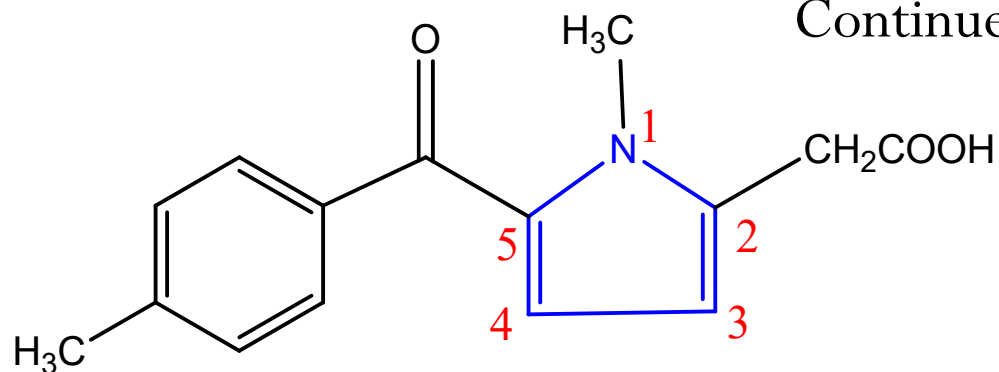
IUPAC: **1-(4-chlorobenzoyl)-5-methoxy-2-methylindol-3-acetic acid**



Sulindac

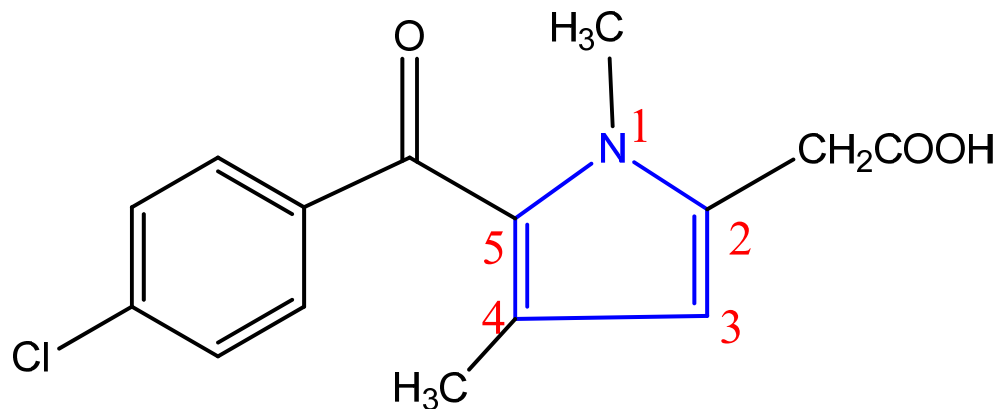
IUPAC: **5-fluoro-2-methyl-1-[4-(methylsulfinyl)benzyliden]inden-3-acetic acid**

Continued.....



Tolmetin

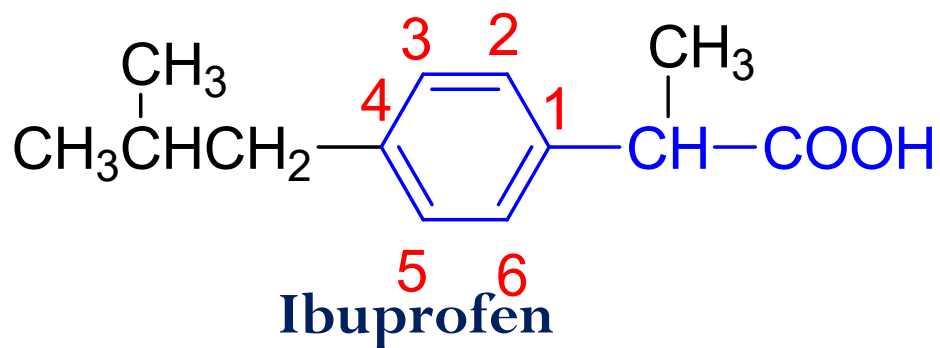
IUPAC: **1-methyl-5-tolylpyrrole-2-acetic acid**



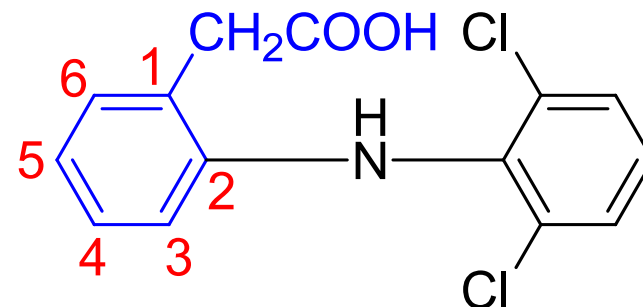
Zomepirac

IUPAC: **5-(4-Chlorobenzoyl)-1,4-dimethyl-1H-pyrrole-2-acetic acid**

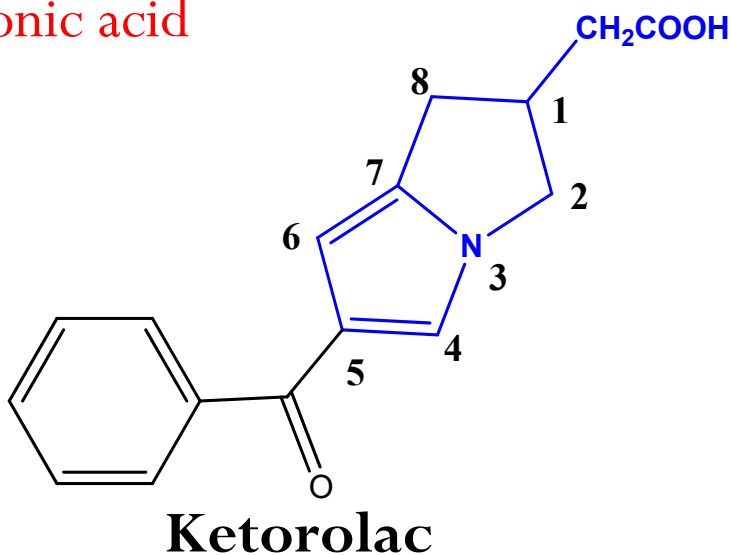
Arylacetic acid derivatives



IUPAC: 2-(4-iso-butylphenyl)
propionic acid



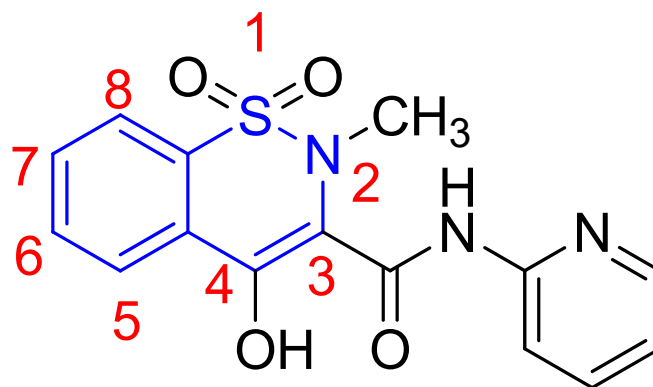
IUPAC: 2-[(2,6-dichlorophenyl)-
amino]-phenylacetic acid



IUPAC: 5-benzoyl-2,3-dihydro-1*H*-pyrrolizine-1-carboxylic acid

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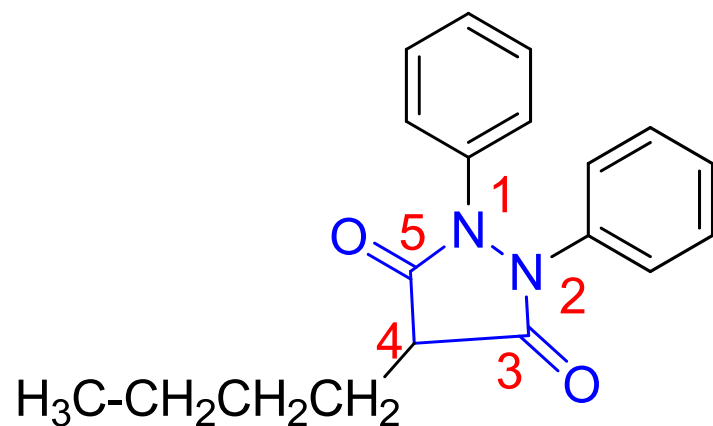
Oxicam derivatives



Piroxicam

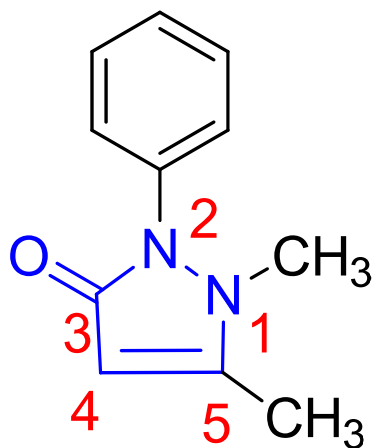
IUPAC: **1,1-dioxide-4-hydroxy-2-methyl-N-2-pyridyl-2H-1,2-benzothiazine-3-carboxamide**

Pyrazolone & Pyrazolidinedione derivatives:



Phenylbutazone

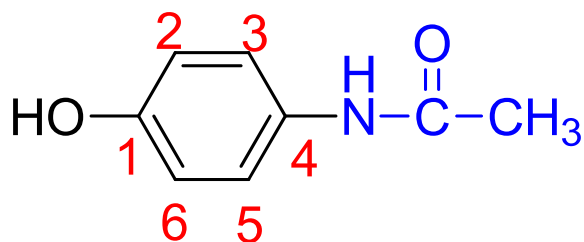
IUPAC: 4-butyl-1,2-diphenyl-3,5-pyrazolidinedione



Phenazone/ Antipyrine

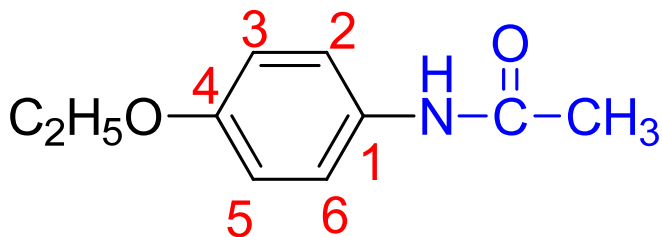
IUPAC: 1,5-Dimethyl-2-phenyl-3-pyrazolone

p-Aminophenol derivatives



Acetaminophen

IUPAC: *p*-acetaminophenol



Phenacetin

IUPAC: N-(4-Ethoxyphenyl)
acetamide