## Indazoles

Indoles, indazoles, and benzimidazoles feature prominently in pharmaceuticals, agrochemicals, dyes, and novel materials. Many of the compounds listed below have been extensively cited in scientific literature.

Several groups and patents have reported the use of 3-amino-5-(trifluoromethyl)-1H-indazole (H32995), in the synthesis of pharmaceutically active products, such an example is for the synthesis of analogues of Melanin concentrating hormone (MCH), a orexigenic neuropeptide, which has shown potential in anti-obesity therapy.<sup>1</sup> Reported reactions of 7-bromo-1H-indazole (H32380) or 6-bromo-1H-indazole (H32623) include the cross-coupling of 7-haloheterocycles with primary and secondary amines,<sup>2</sup> and also the synthesis for the isolation of protected indazolylboronic esters.<sup>3</sup>

Indoazoles such as 6-bromo-1H-indazole (H32623) or ethyl 1H-indazole-5-carboxylate (H32649) can be regioselectively protected at N-2 by a 2-(trimethylsilyl) ethoxymethyl (SEM) group using novel conditions.<sup>4</sup> The product 1H-indazole-4-boronic acid pinacol ester (H32507) has been used in synthesis of several small molecule inhibitors as potential cancer therapeutics.<sup>5,6</sup> A series of 7-monosubstituted indoles, e.g. 1H-indazole-7-carboxylic acid (H32463) and 7-nitro-1H-indazole (L07970) and 3,7-disubstituted indazoles have been prepared and evaluated as inhibitors of nitric oxide synthases (NOS).<sup>7</sup>



**H32995** 3-Amino-5-(trifluoromethyl)-1Hindazole, 97% [2250-53-5]



**H32380** 7-Bromo-1H-indazole, 95% [53857-58-2]



H31995 Ethyl 1H-indazole-4-carboxylate, 95%



H32010 1-Boc-6-amino-1H-indazole, 97% [219503-81-8]





Rr



H31755 5-Bromo-1-(2-tetrahydropyranyl)-1Hindazole, 95%



**H32649** Ethyl 1H-indazole-5-carboxylate, 95% [192944-51-7]

H32098

Ethyl 1H-indazole-3-carboxylate, 95%

[4498-68-4]



H32249 Ethyl 1H-indazole-6-carboxylate, 95%



## Indazoles



H32468 Ethyl 1H-indazole-7-carboxylate, 95%



H32507 1H-Indazole-4-boronic acid pinacol ester, 95% [885618-33-7]



H32535 1H-Indazole-5-carboxylic acid, 95% [61700-61-6]





H31828 5-Methyl-1H-indazole, 95% [1776-37-0]



H32933 Methyl 1H-indazole-6-carboxylate, 95% [170487-40-8]



H32463 1H-Indazole-7-carboxylic acid, 95% [677304-69-7]



H32529 Methyl 1H-indazole-7-carboxylate, 95% [755752-82-0]



H31700 1-Methyl-6-nitro-1H-indazole, 95% [6850-23-3]

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<sup>2</sup> J. L. Henderson, and S. L. Buchwald, Org. Lett., 2010, **12**, 4442.

<sup>3</sup> F. Crestey, E. Lohou, S. Stiebing, V. Collot, and S. Rault, Synlett, 2009, 615.

<sup>4</sup> G. Luo, L. Chen, and G. Dubowchik, J. Org. Chem., 2006, 71, 5392.

<sup>5</sup> D. P. Sutherlin, et al., J. Med. Chem., 2010, 53, 1086.

<sup>6</sup> X. Wang, D. M. Berger, E. J. Salaski, N. Torres, Y. Hu, J. I. Levin, D. Powell, D. Wojciechowicz, K. Collins, and E. Frommer, Bioorg. & Med. Chem. Lett., 2009, 19, 6571.

<sup>7</sup> B. Cottyn, F. Acher, B. Ramassamy, L. Alvey, M. Lepoivre, Y. Frapart, D. Stuehr, D. Mansuy, J.-L. Boucher and D. Vichard, Bioorg. & Med. Chem., 2008,16, 5962.

