**Synthesis of an Indoleamine-2,3-dioxygenase-1 (IDO1) Inhibitor**

**Significance:** Indoleamine-2,3-dioxygenase-1 (IDO1) is strongly involved in tumor immune resistance. The immune suppressive effect of IDO1 results from its capacity to degrade tryptophan to \( N \)-formylkyurenine, the first and rate-limiting step of the kyurenine pathway. The target molecule is a low-nanomolar IDO1 inhibitor.

**Comment:** Reaction of aldoxime with \( N \)-chlorosuccinimide (NCS) afforded \( N \)-hydroxycarbimidoyl chloride. Treatment of this compound with 3-chloroaniline followed by hydroxyamidine cyclization using 1,1'-carbonyldiimidazole (CDI) and Boc deprotection afforded the key amino intermediate.

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