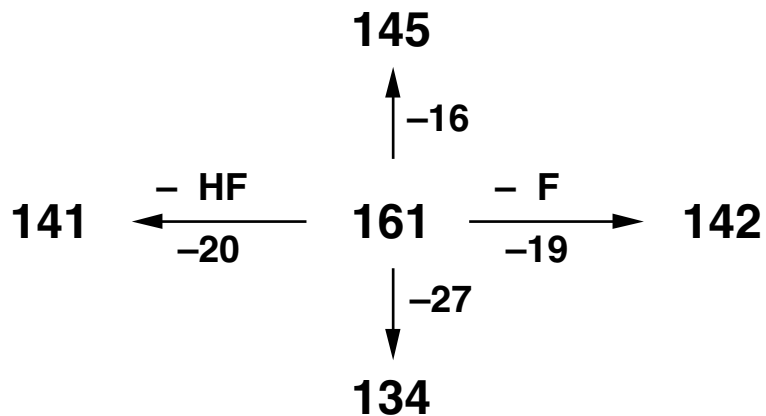


Y 33

MS: $M^{+\cdot} = 161$ möglich ungerade Anzahl N



IR:

3500 cm^{-1}	O—H _{st}	N—H _{st}
3400		
~ 3000	C—H _{st}	
1620		
1600		
1500		
1470		

Gerüstschwingungen Arylring

^{13}C -NMR: Vorsicht: ^{19}F im Molekül

146.7 ~131.5 129.7 128.3 125.6 122.9 120.2 118.0 115.0 111.3 ppm

C	C	CH		CF ₃		CH	CH	CH
	Quartett 30 Hz			Quartett 270 Hz			Quartette 4 Hz	
						Quartett 1 Hz		

$\geq 7 \text{ C}$
 $\geq 4 \text{ H}$
 $\geq 3 \text{ F}$

^1H -NMR:

	7.18	6.93	6.84	6.76	3.8	ppm
∫	1	:	1	:	1	:
	:	1	:	1	:	2
	:	6	H			
	CH	CH	CH	CH	XH	
					XH	

Bilanz:

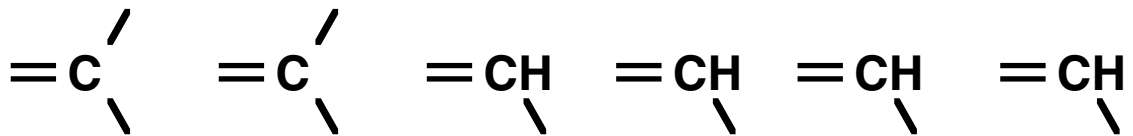
7 C	84
6 H	6
1 N	14
3 F	57
total	161 $\hat{=}$ M ⁺

Summenformel: $\text{C}_7\text{H}_6\text{NF}_3 \Rightarrow 4 \text{ DBÄ}$

¹H-NMR:

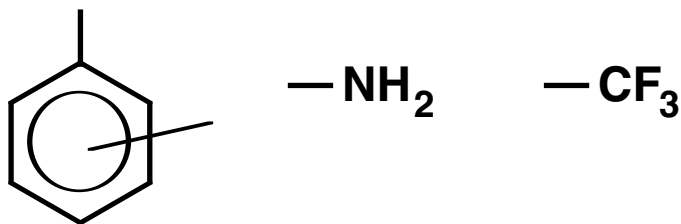
Signal bei 3.8 ppm: —NH₂

Fragmente: —NH₂ —CF₃

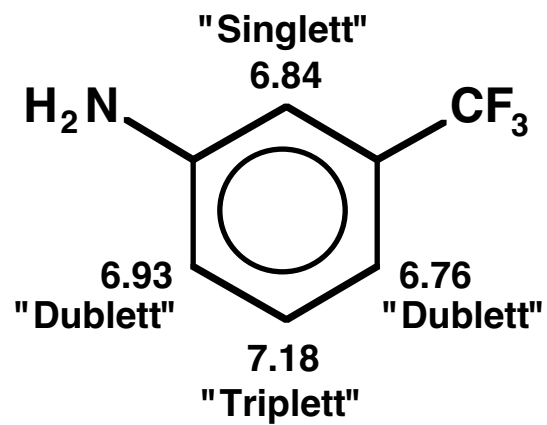


6 halbe Doppelbindungen: 3 DBÄ ⇒ 1 Ring

Fragmente:

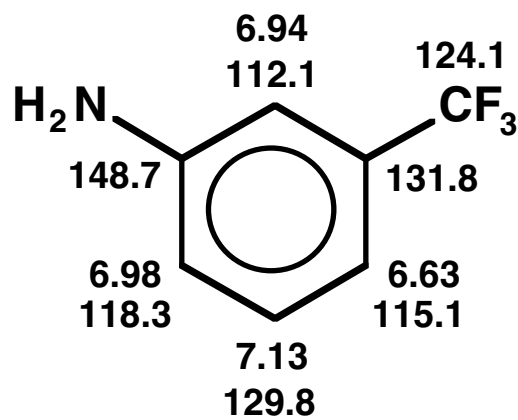


¹H-NMR:



NMR:

abgeschätzte chemische Verschiebungen



MS:

