

Compounds in the FAS Kit & Emergent Panels (FAS V1-V4)



The Fentanyl Analog Screening (FAS) Kit and Emergent Panels Version 1, 2, 3, and 4 contain analog reference materials that enable labs to screen for 250 synthetic opioid compounds, including more than 210 fentanyl analogs.

FAS Kit

- Provides coverage of 120 fentanyl analogs
- Released January 2019
- Includes listed compound Nos. 1-120

No.	Compound Name
1	<i>para</i> -methoxy Butyryl fentanyl (hydrochloride)
2	Acetyl norfentanyl (hydrochloride)
3	α -methyl Acetyl fentanyl (hydrochloride)
4	Crotonyl fentanyl
5	Fentanyl
6	Acrylfentanyl (hydrochloride)
7	Cyclopropyl fentanyl (hydrochloride)
8	Isobutyryl fentanyl (hydrochloride)
9	Methoxyacetyl fentanyl (hydrochloride)
10	Valeryl fentanyl (hydrochloride)
11	($\pm$)- <i>cis</i> -3-methyl Fentanyl (hydrochloride)
12	2'-fluoro <i>ortho</i> -Fluorofentanyl (hydrochloride)
13	<i>ortho</i> -Fluorobutyryl fentanyl (hydrochloride)
14	<i>ortho</i> -Fluorofentanyl (hydrochloride)
15	<i>ortho</i> -isopropyl Furanyl fentanyl
16	<i>ortho</i> -methoxy Furanyl fentanyl
17	<i>ortho</i> -methyl Furanyl fentanyl
18	<i>meta</i> -Fluorobutyryl fentanyl (hydrochloride)
19	($\pm$)- <i>cis</i> -3-methyl Butyryl fentanyl (hydrochloride)
20	4'-methyl Acetyl fentanyl (hydrochloride)
21	<i>para</i> -chloro Furanyl fentanyl
22	<i>para</i> -Methoxyfentanyl (hydrochloride)
23	<i>para</i> -methoxy Furanyl fentanyl (hydrochloride)
24	α -methyl Butyryl fentanyl (hydrochloride)
25	α -methyl Thiofentanyl (hydrochloride)
26	Benzodioxole fentanyl
27	Phenyl fentanyl (hydrochloride)
28	Benzyl fentanyl (hydrochloride)
29	N-benzyl Furanyl norfentanyl (hydrochloride)

No.	Compound Name
30	Cyclohexyl fentanyl (hydrochloride)
31	Cyclopentyl fentanyl (hydrochloride)
32	<i>meta</i> -Methylfentanyl (hydrochloride)
33	N-methyl Norcarfentanil (hydrochloride)
34	Norcarfentanil (hydrochloride)
35	<i>ortho</i> -methyl Acrylfentanyl (hydrochloride)
36	<i>ortho</i> -methyl Methoxyacetyl fentanyl (hydrochloride)
37	<i>para</i> -Chloroisobutyryl fentanyl (hydrochloride)
38	Tetrahydrofuran fentanyl (hydrochloride)
39	2,2,3,3-tetramethyl-Cyclopropyl fentanyl (hydrochloride)
40	Thienyl fentanyl (hydrochloride)
41	Thiophene fentanyl (hydrochloride)
42	Thiofentanyl (hydrochloride)
43	<i>ortho</i> -methyl Acetyl fentanyl (hydrochloride)
44	α' -methoxy Fentanyl (hydrochloride)
45	α' -methyl Butyryl fentanyl (hydrochloride)
46	Cyclobutyl fentanyl (hydrochloride)
47	<i>meta</i> -Fluorofentanyl (hydrochloride)
48	N-methyl Cyclopropyl norfentanyl (hydrochloride)
49	($\pm$)- <i>trans</i> -3-methyl Thiofentanyl (hydrochloride)
50	4'-fluoro, <i>para</i> -fluoro ($\pm$)- <i>trans</i> -3-methyl Fentanyl (hydrochloride)
51	4'-methyl Fentanyl (hydrochloride)
52	Alfentanil (hydrochloride)
53	Benzyl Carfentanil (hydrochloride)
54	Benzyl Acrylfentanyl (hydrochloride)
55	β' -Phenyl fentanyl
56	β -methyl Acetyl fentanyl (hydrochloride)
57	Ethoxyacetyl fentanyl (hydrochloride)
58	Fentanyl Carbamate
59	Furanyl fentanyl 3-furancarboxamide isomer (hydrochloride)
60	Furanylethyl fentanyl (hydrochloride)
61	Isovaleryl fentanyl (hydrochloride)
62	<i>meta</i> -Fluoroisobutyryl fentanyl (hydrochloride)

Compounds in the FAS Kit & Emergent Panels (FAS V1-V4)

No.	Compound Name
63	<i>meta</i> -fluoro Methoxyacetyl fentanyl (hydrochloride)
64	<i>meta</i> -methyl Furanyl fentanyl (hydrochloride)
65	<i>meta</i> -methyl Methoxyacetyl fentanyl (hydrochloride)
66	Methacrylfentanyl
67	<i>ortho</i> -fluoro Acrylfentanyl (hydrochloride)
68	<i>ortho</i> -fluoro Furanyl fentanyl (hydrochloride)
69	<i>ortho</i> -Fluoroisobutyl fentanyl (hydrochloride)
70	<i>ortho</i> -methoxy Butyl fentanyl (hydrochloride)
71	<i>ortho</i> -methyl Cyclopropyl fentanyl (hydrochloride)
72	<i>ortho</i> -Methylfentanyl (hydrochloride)
73	<i>ortho</i> -methyl Phenyl fentanyl (hydrochloride)
74	<i>para</i> -Chlorofentanyl (hydrochloride)
75	<i>para</i> -chloro Acrylfentanyl (hydrochloride)
76	<i>para</i> -Chlorobutyl fentanyl (hydrochloride)
77	<i>para</i> -chloro Cyclobutyl fentanyl (hydrochloride)
78	<i>para</i> -chloro Cyclopentyl fentanyl (hydrochloride)
79	<i>para</i> -chloro Methoxyacetyl fentanyl (hydrochloride)
80	<i>para</i> -chloro Valeryl fentanyl (hydrochloride)
81	<i>para</i> -chloro Cyclopropyl fentanyl (hydrochloride)
82	<i>para</i> -fluoro Acrylfentanyl
83	<i>para</i> -fluoro Crotonyl fentanyl
84	<i>para</i> -fluoro Cyclopentyl fentanyl (hydrochloride)
85	<i>para</i> -fluoro Cyclopropyl fentanyl (hydrochloride)
86	<i>para</i> -fluoro Furanyl fentanyl 3-furancarboxamide (hydrochloride)
87	<i>para</i> -fluoro Furanyl fentanyl (hydrochloride)
88	<i>para</i> -fluoro Methoxyacetyl fentanyl (hydrochloride)
89	<i>para</i> -fluoro Tetrahydrofuran fentanyl (hydrochloride)
90	<i>para</i> -fluoro Valeryl fentanyl (hydrochloride)
91	<i>para</i> -Fluoroacetyl fentanyl (hydrochloride)
92	<i>para</i> -methoxy Acrylfentanyl (hydrochloride)
93	<i>para</i> -methoxy Tetrahydrofuran fentanyl (hydrochloride)
94	<i>para</i> -methoxy Valeryl fentanyl (hydrochloride)
95	<i>para</i> -Methylfentanyl (hydrochloride)
96	<i>para</i> -methyl Acetyl fentanyl (hydrochloride)
97	<i>para</i> -methyl Acrylfentanyl (hydrochloride)
98	<i>para</i> -methyl Cyclopropyl fentanyl (hydrochloride)
99	<i>para</i> -methyl Furanyl fentanyl (hydrochloride)

No.	Compound Name
100	<i>para</i> -methyl Isobutyl fentanyl (hydrochloride)
101	<i>para</i> -methyl Methoxyacetyl fentanyl (hydrochloride)
102	<i>para</i> -methyl Tetrahydrofuran fentanyl (hydrochloride)
103	Phenylacetyl fentanyl (hydrochloride)
104	Pivaloyl fentanyl (hydrochloride)
105	Remifentanyl (hydrochloride)
106	Sufentanyl
107	Tetrahydrofuran fentanyl 3-tetrahydrofurancarboxamide (hydrochloride)
108	(±)- <i>cis</i> -3-methyl Thiofentanyl (hydrochloride)
109	β-Hydroxythiofentanyl (hydrochloride)
110	Norfentanyl
111	4-ANPP
112	β-methyl Fentanyl (hydrochloride)
113	(±)- <i>trans</i> -3-methyl Fentanyl (hydrochloride)
114	<i>para</i> -Fluorobutyl fentanyl (hydrochloride)
115	FIBF (hydrochloride)
116	α-methyl Fentanyl (hydrochloride)
117	Ocfentanyl (hydrochloride)
118	<i>para</i> -Fluorofentanyl (hydrochloride)
119	Butyl norfentanyl (hydrochloride)
120	Butyl fentanyl (hydrochloride)

FAS Kit - Emergent Panel Version 1

- Provides coverage of additional fentanyl analogs & other synthetic opioids
- Released January 2019
- Includes listed compounds Nos. 121-150

No.	Compound Name
121	Furanyl fentanyl (hydrochloride)
122	Norsufentanyl
123	Acetyl fentanyl (hydrochloride)
124	4'-Fluorofentanyl (hydrochloride)
125	4-Phenyl fentanyl (hydrochloride)
126	Cyclopentenyl fentanyl (hydrochloride)
127	<i>para</i> -methyl Cyclopentyl fentanyl (hydrochloride)
128	<i>meta</i> -methyl Cyclopropyl fentanyl (hydrochloride)
129	<i>para</i> -methyl Butyl fentanyl (hydrochloride)

Compounds in the FAS Kit & Emergent Panels (FAS V1-V4)

No.	Compound Name
130	<i>para</i> -methoxy Acetyl fentanyl (hydrochloride)
131	<i>para</i> -methoxy Methoxyacetyl fentanyl (hydrochloride)
132	Tetrahydrothiophene fentanyl
133	N,N-Dimethylamido-despropionyl fentanyl
134	Hexanoyl fentanyl (hydrochloride)
135	Heptanoyl fentanyl (hydrochloride)
136	β-Hydroxythioacetylfentanyl
137	2,3-seco-Fentanyl (hydrochloride)
138	Seneciolyfentanyl
139	Phenoxyacetyl fentanyl (hydrochloride)
140	Fentanyl Methyl Carbamate
141	β-hydroxy Fentanyl (hydrochloride)
142	N-(3-ethylindole) Norfentanyl
143	U-47700
144	U-49900
145	U-48800 (hydrochloride)
146	Isopropyl U-47700
147	AH 7921
148	MT-45 (hydrochloride)
149	2-fluoro MT-45 (hydrochloride)
150	Furanyl norfentanyl (hydrochloride)

FAS Kit - Emergent Panel Version 2 and 3

- Provides coverage of additional fentanyl analogs & other synthetic opioids
- Released February 2020
- Includes listed compounds Nos. 151-212

No.	Compound Name
151	U-48520
152	U-50488 (hydrochloride)
153	U-51754 (hydrochloride)
154	U-47931E
155	U-48753E (maleate)
156	<i>meta</i> -fluoro Furanyl fentanyl (hydrochloride)
157	3,4-Methylenedioxy U-47700 (hydrochloride)
158	3,4-Ethylenedioxy U-51754 (hydrochloride)
159	3,4-Ethylenedioxy U-47700 (hydrochloride)

No.	Compound Name
160	N-methyl U-47931E
161	Propyl U-47700
162	4-phenyl U-51754 (hydrochloride)
163	N-desmethyl U-47700
164	N,N-didesmethyl U-47700 (trifluoroacetate salt)
165	3'-methyl Acetyl fentanyl (hydrochloride)
166	2'-methyl Acetyl fentanyl (hydrochloride)
167	<i>meta</i> -methyl Acetyl fentanyl (hydrochloride)
168	2'-methyl Fentanyl (hydrochloride)
169	3'-methyl Fentanyl (hydrochloride)
170	Remifentanil Acid (trifluoroacetate salt)
171	(±)- <i>cis</i> -3-methyl Norfentanyl
172	N-Benzyl phenyl norfentanyl (hydrochloride)
173	<i>para</i> -fluoro 4-ANBP
174	Despropionyl <i>para</i> -Fluorofentanyl
175	Despropionyl <i>meta</i> -Methylfentanyl
176	N-benzyl <i>para</i> -fluoro Norfentanyl (hydrochloride)
177	Despropionyl 2'-fluoro <i>ortho</i> -Fluorofentanyl
178	(±)- <i>cis</i> -Isofentanyl (hydrochloride)
179	N-methyl Norfentanyl (hydrochloride)
180	N-benzyl <i>para</i> -fluoro Cyclopropyl norfentanyl (hydrochloride)
181	<i>para</i> -Bromofentanyl
182	<i>para</i> -Toluoyl fentanyl (hydrochloride)
183	N-(MDA) Fentanyl
184	N-(Phentermine) Fentanyl
185	N-(6-APB) Fentanyl
186	N-(6-APDB) Fentanyl
187	N-(2-APB) Fentanyl
188	2',5'-dimethoxy Fentanyl (hydrochloride)
189	N-(2C-I) Fentanyl
190	N-(2C-B) Fentanyl
191	N-(2C-C) Fentanyl
192	N-(2C-N) Fentanyl
193	N-(2C-TFM) Fentanyl
194	N-(2C-D) Fentanyl
195	N-(2C-G) Fentanyl
196	N-(2C-E) Fentanyl

Compounds in the FAS Kit & Emergent Panels (FAS V1-V4)

No.	Compound Name
197	N-(2C-iP) Fentanyl
198	N-(2C-P) Fentanyl
199	N-(2C-T) Fentanyl
200	N-(2C-T-2) Fentanyl
201	N-(2C-T-4) Fentanyl
202	N-(2C-T-7) Fentanyl
203	N-(2C-B-fly) Fentanyl
204	N-(3C-B-fly) Fentanyl
205	N-(2,5-DMA) Fentanyl
206	N-(3,4,5-TMA) Fentanyl
207	N-(DOC) Fentanyl
208	N-(DOB) Fentanyl
209	N-(DOI) Fentanyl
210	N-(DOM) Fentanyl (hydrochloride)
211	N-(DOET) Fentanyl
212	N-(DOBU) Fentanyl

FAS Kit - Emergent Panel Version 4

- Provides coverage of fentanyl analogs & other synthetic opioids
- Released February 2021
- Includes listed compounds Nos. 213-250

No.	Compound Name
213	Despropionyl <i>ortho</i> -Fluorofentanyl
214	4-Piperidone (hydrochloride hydrate)
215	N-Benzyl-4-piperidone
216	O-Desmethyl- <i>cis</i> -tramadol (hydrochloride)
217	NPP
218	2-methyl AP-237 (hydrochloride)
219	Tianeptine (sodium salt)
220	Piperidylthiambutene (hydrochloride)

No.	Compound Name
221	Isotonitazene
222	4-methyl Fentanyl (hydrochloride)
223	<i>meta</i> -fluoro Acrylfentanyl
224	Metonitazene (citrate)
225	4-Anilino-1-benzylpiperidine
226	4-Anilino-1-Boc-piperidine
227	<i>para</i> -chloro Furanyl fentanyl 3-furancarboxamide
228	Thiophene fentanyl 3-thiophenecarboxamide (hydrochloride)
229	<i>para</i> -Chloroacetyl fentanyl (hydrochloride)
230	<i>ortho</i> -fluoro Valeryl fentanyl (hydrochloride)
231	<i>meta</i> -fluoro Valeryl fentanyl (hydrochloride)
232	3'-fluoro <i>ortho</i> -Fluorofentanyl (hydrochloride)
233	Etonitazene
234	AP-237 (hydrochloride)
235	2-fluoro Viminol
236	Brorphine (hydrochloride)
237	2'-Fluorofentanyl (hydrochloride)
238	3'-Fluorofentanyl (hydrochloride)
239	<i>meta</i> -methoxy Furanyl fentanyl
240	<i>para</i> -hydroxy Butyryl fentanyl
241	2,3-Benzodioxole fentanyl
242	Cyclopropanecetyl fentanyl (hydrochloride)
243	Tigloyl fentanyl
244	2',3'-dimethoxy Fentanyl (hydrochloride)
245	2',4'-dimethoxy Fentanyl (hydrochloride)
246	2',6'-dimethoxy Fentanyl (hydrochloride)
247	3',4'-dimethoxy Fentanyl (hydrochloride)
248	3',5'-dimethoxy Fentanyl (hydrochloride)
249	AP-238 (hydrochloride)
250	4-Anilinopiperidine (hydrochloride)