

Compounds Included in the Fentanyl Analog Screening (FAS) Kit, FAS Kit - Emergent Panels, and the FAS Kit - Emergent Drug Panel



The Fentanyl Analog Screening (FAS) Kit and its expansion panels (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.

The FAS Kit - Emergent Drug Panel (EDP) expands testing laboratory capabilities to the detection and identification of additional emerging drugs of abuse that are commonly found as co-drugs in fentanyl-containing samples. The FAS Kit - EDP includes 60 stimulants, hallucinogens, benzodiazepines, synthetic cannabinoids, and the veterinary sedative and analgesic drug xylazine. This panel is distinct from the previous FAS Kit and FAS Kit - Emergent Panels as it does not contain any fentanyl compounds or other synthetic opioids.

FAS Kit

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)

No.	Compound Name
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)
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)

Compounds Included *Continued*

No.	Compound Name
46	Cyclobutyl fentanyl (hydrochloride)
47	<i>meta</i> -Fluorofentanyl (hydrochloride)
48	N-methyl Cyclopropyl norfentanyl (hydrochloride)
49	(±)- <i>trans</i> -3-methyl Thiofentanyl (hydrochloride)
50	4'-fluoro, <i>para</i> -fluoro (±)- <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)
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> -Fluoroisobutyryl fentanyl (hydrochloride)
70	<i>ortho</i> -methoxy Butyryl 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> -Chlorobutyryl 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

No.	Compound Name
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)
100	<i>para</i> -methyl Isobutyryl 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	Remifentanil (hydrochloride)
106	Sufentanil
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> -Fluorobutyryl fentanyl (hydrochloride)
115	FIBF (hydrochloride)
116	α-methyl Fentanyl (hydrochloride)
117	Ocfentanil (hydrochloride)
118	<i>para</i> -Fluorofentanyl (hydrochloride)
119	Butyryl norfentanyl (hydrochloride)

Compounds Included *Continued*

No.	Compound Name
120	Butyryl fentanyl (hydrochloride)

FAS Kit - Emergent Panel Version 1

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

No.	Compound Name
151	U-48520

No.	Compound Name
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)
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	(\pm)- <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	(\pm)- <i>cis</i> -Isorfentanyl (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)

Compounds Included *Continued*

No.	Compound Name
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
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

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)
221	Isotonitazene
222	4-methyl Fentanyl (hydrochloride)

No.	Compound Name
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	Cyclopropaneacetyl 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)

FAS Kit - Emergent Drug Panel

No.	Compound Name
251	Clonazepam
252	Etizolam
253	Flualprazolam
254	Flubromazolam
255	Desalkylflurazepam
256	Bromazolam

Compounds Included *Continued*

No.	Compound Name
257	Adinazolam
258	Deschloroetizolam
259	(±)-Meclonazepam
260	Flubromazepam
261	Pyrazolam
262	Diclazepam
263	Bromazepam
264	Metizolam
265	8-Aminoclonazolam
266	Phenazepam
267	Fluclotizolam
268	N-Pyrrolidino Etonitazene
269	Etodesnitazene (citrate)
270	Protonitazene (hydrochloride)
271	Dipyanone (hydrochloride)
272	N-Piperidinyl Etonitazene (citrate)
273	Butonitazene
274	Eutylone (hydrochloride)
275	α-Pyrrolidinoisohexanophenone (hydrochloride)
276	Deschloroketamine (hydrochloride)
277	3-hydroxy PCP (hydrochloride)
278	2-fluoro Deschloroketamine (hydrochloride)
279	3-methoxy PCP (hydrochloride)
280	3-chloro PCP (hydrochloride)
281	α-Ethylaminohexanophenone (hydrochloride)
282	Pentylone (hydrochloride)
283	α-Pyrrolidinohexanophenone (hydrochloride)

No.	Compound Name
284	N-ethyl Pentylone (hydrochloride)
285	3,4-Methylenedioxy-N-benzylcathinone (hydrochloride)
286	4-methoxy PCP (hydrochloride)
287	MDMB-4en-PINACA
288	N-butyl Pentylone (hydrochloride)
289	3,4-Methylenedioxy PV8 (hydrochloride)
290	α-Ethylaminopentiophenone (hydrochloride)
291	deschloro-N-ethyl-Ketamine (hydrochloride)
292	4'-chloro-α-Pyrrolidinovalerophenone (hydrochloride)
293	α-Pyrrolidinopentiophenone (hydrochloride)
294	4-hydroxy DiPT (hydrochloride)
295	3-hydroxy PCE (hydrochloride)
296	5-fluoro MDMB-PICA
297	Xylazine
298	4-fluoro MDMB-BUTINACA
299	ADB-BINACA
300	(S)-5-fluoro ADB
301	4-fluoro MDMB-BUTICA
302	ADB-4en-PINACA
303	ADB-HEXINACA
304	4-fluoro ABUTINACA
305	ADB-BUTINACA
306	ACHMINACA
307	4-cyano CUMYL-BUTINACA
308	MMB-FUBINACA
309	5-fluoro EDMB-PINACA
310	5-fluoro EDMB-PICA

NEW: FAS KIT - EMERGENT DRUG PANEL

- Added April 2023
- Contains 60 additional emerging drugs of abuse including, stimulants, hallucinogens, benzodiazepines, synthetic cannabinoids, and xylazine
- Includes listed compound Nos. 251-310