

NY-001 PCT\_ST25.txt  
SEQUENCE LISTING

<110> Efranat Ltd  
<120> MACROPHAGE ACTIVATING FACTOR FOR PHARMACEUTICAL COMPOSITIONS  
<130> NY/001 PCT  
<150> US 61/472642  
<151> 2011-04-07  
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<170> PatentIn version 3.5  
<210> 1  
<211> 458  
<212> PRT  
<213> Homo sapiens

<220>  
<221> MISC\_FEATURE  
<222> (152)..(152)  
<223> X At position 152 may be Glycine or Glutamate

<220>  
<221> MISC\_FEATURE  
<222> (429)..(429)  
<223> X At position 429 may be Arginine or Histidine

<400> 1

Leu Glu Arg Gly Arg Asp Tyr Glu Lys Asn Lys Val Cys Lys Glu Phe  
1 5 10 15

Ser His Leu Gly Lys Glu Asp Phe Thr Ser Leu Ser Leu Val Leu Tyr  
20 25 30

Ser Arg Lys Phe Pro Ser Gly Thr Phe Glu Gln Val Ser Gln Leu Val  
35 40 45

Lys Glu Val Val Ser Leu Thr Glu Ala Cys Cys Ala Glu Gly Ala Asp  
50 55 60

Pro Asp Cys Tyr Asp Thr Arg Thr Ser Ala Leu Ser Ala Lys Ser Cys  
65 70 75 80

Glu Ser Asn Ser Pro Phe Pro Val His Pro Gly Thr Ala Glu Cys Cys  
85 90 95

Thr Lys Glu Gly Leu Glu Arg Lys Leu Cys Met Ala Ala Leu Lys His  
100 105 110

Gln Pro Gln Glu Phe Pro Thr Tyr Val Glu Pro Thr Asn Asp Glu Ile  
115 120 125

Cys Glu Ala Phe Arg Lys Asp Pro Lys Glu Tyr Ala Asn Gln Phe Met  
130 135 140

Trp Glu Tyr Ser Thr Asn Tyr Xaa Gln Ala Pro Leu Ser Leu Leu Val  
145 150 155 160

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Ser Tyr Thr Lys Ser Tyr Leu Ser Met Val Gly Ser Cys Cys Thr Ser  
165 170 175

Ala Ser Pro Thr Val Cys Phe Leu Lys Glu Arg Leu Gln Leu Lys His  
180 185 190

Leu Ser Leu Leu Thr Thr Leu Ser Asn Arg Val Cys Ser Gln Tyr Ala  
195 200 205

Ala Tyr Gly Glu Lys Lys Ser Arg Leu Ser Asn Leu Ile Lys Leu Ala  
210 215 220

Gln Lys Val Pro Thr Ala Asp Leu Glu Asp Val Leu Pro Leu Ala Glu  
225 230 235 240

Asp Ile Thr Asn Ile Leu Ser Lys Cys Cys Glu Ser Ala Ser Glu Asp  
245 250 255

Cys Met Ala Lys Glu Leu Pro Glu His Thr Val Lys Leu Cys Asp Asn  
260 265 270

Leu Ser Thr Lys Asn Ser Lys Phe Glu Asp Cys Cys Gln Glu Lys Thr  
275 280 285

Ala Met Asp Val Phe Val Cys Thr Tyr Phe Met Pro Ala Ala Gln Leu  
290 295 300

Pro Glu Leu Pro Asp Val Glu Leu Pro Thr Asn Lys Asp Val Cys Asp  
305 310 315 320

Pro Gly Asn Thr Lys Val Met Asp Lys Tyr Thr Phe Glu Leu Ser Arg  
325 330 335

Arg Thr His Leu Pro Glu Val Phe Leu Ser Lys Val Leu Glu Pro Thr  
340 345 350

Leu Lys Ser Leu Gly Glu Cys Cys Asp Val Glu Asp Ser Thr Thr Cys  
355 360 365

Phe Asn Ala Lys Gly Pro Leu Leu Lys Lys Glu Leu Ser Ser Phe Ile  
370 375 380

Asp Lys Gly Gln Glu Leu Cys Ala Asp Tyr Ser Glu Asn Thr Phe Thr  
385 390 395 400

Glu Tyr Lys Lys Lys Leu Ala Glu Arg Leu Lys Ala Lys Leu Pro Asp  
405 410 415

Ala Thr Pro Thr Glu Leu Ala Lys Leu Val Asn Lys Xaa Ser Asp Phe  
420 425 430

Ala Ser Asn Cys Cys Ser Ile Asn Ser Pro Pro Leu Tyr Cys Asp Ser

Glu Ile Asp Ala Glu Leu Lys Asn Ile Leu  
450 455

<210> 2  
<211> 458  
<212> PRT  
<213> Homo sapiens

<220>  
<221> MISC\_FEATURE  
<222> (152)..(152)  
<223> X at position 152 may be Glycine or Glutamate

<220>  
<221> MISC\_FEATURE  
<222> (429)..(429)  
<223> X at position 429 may be Arginine or Histidine

<400> 2

Leu Glu Arg Gly Arg Asp Tyr Glu Lys Asn Lys Val Cys Lys Glu Phe  
1 5 10 15

Ser His Leu Gly Lys Glu Asp Phe Thr Ser Leu Ser Leu Val Leu Tyr  
20 25 30

Ser Arg Lys Phe Pro Ser Gly Thr Phe Glu Gln Val Ser Gln Leu Val  
35 40 45

Lys Glu Val Val Ser Leu Thr Glu Ala Cys Cys Ala Glu Gly Ala Asp  
50 55 60

Pro Asp Cys Tyr Asp Thr Arg Thr Ser Ala Leu Ser Ala Lys Ser Cys  
65 70 75 80

Glu Ser Asn Ser Pro Phe Pro Val His Pro Gly Thr Ala Glu Cys Cys  
85 90 95

Thr Lys Glu Gly Leu Glu Arg Lys Leu Cys Met Ala Ala Leu Lys His  
100 105 110

Gln Pro Gln Glu Phe Pro Thr Tyr Val Glu Pro Thr Asn Asp Glu Ile  
115 120 125

Cys Glu Ala Phe Arg Lys Asp Pro Lys Glu Tyr Ala Asn Gln Phe Met  
130 135 140

Trp Glu Tyr Ser Thr Asn Tyr Xaa Gln Ala Pro Leu Ser Leu Leu Val  
145 150 155 160

Ser Tyr Thr Lys Ser Tyr Leu Ser Met Val Gly Ser Cys Cys Thr Ser  
165 170 175

Ala Ser Pro Thr Val Cys Phe Leu Lys Glu Arg Leu Gln Leu Lys His  
180 185 190

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Leu Ser Leu<sub>195</sub> Leu Thr Thr Leu Ser<sub>200</sub> Asn Arg Val Cys Ser<sub>205</sub> Gln Tyr Ala  
 Ala Tyr Gly Glu Lys Lys Ser<sub>215</sub> Arg Leu Ser Asn Leu<sub>220</sub> Ile Lys Leu Ala  
 Gln Lys Val Pro Thr Ala<sub>230</sub> Asp Leu Glu Asp Val<sub>235</sub> Leu Pro Leu Ala Glu<sub>240</sub>  
 Asp Ile Thr Asn Ile<sub>245</sub> Leu Ser Lys Cys Cys<sub>250</sub> Glu Ser Ala Ser Glu<sub>255</sub> Asp  
 Cys Met Ala Lys<sub>260</sub> Glu Leu Pro Glu His<sub>265</sub> Thr Val Lys Leu Cys<sub>270</sub> Asp Asn  
 Leu Ser Thr<sub>275</sub> Lys Asn Ser Lys Phe<sub>280</sub> Glu Asp Cys Cys Gln Glu Lys Thr  
 Ala Met Asp Val Phe Val Cys<sub>295</sub> Thr Tyr Phe Met Pro<sub>300</sub> Ala Ala Gln Leu  
 Pro Glu Leu Pro Asp Val<sub>310</sub> Glu Leu Pro Thr Asn<sub>315</sub> Lys Asp Val Cys Asp<sub>320</sub>  
 Pro Gly Asn Thr Lys<sub>325</sub> Val Met Asp Lys Tyr Thr Phe Glu Leu Ser<sub>335</sub> Arg  
 Arg Thr His Leu<sub>340</sub> Pro Glu Val Phe Leu<sub>345</sub> Ser Lys Val Leu Glu<sub>350</sub> Pro Thr  
 Leu Lys Ser<sub>355</sub> Leu Gly Glu Cys Cys<sub>360</sub> Asp Val Glu Asp Ser<sub>365</sub> Thr Thr Cys  
 Phe Asn Ala Lys Gly Pro Leu<sub>375</sub> Leu Lys Lys Glu Leu<sub>380</sub> Ser Ser Phe Ile  
 Asp Lys Gly Gln Glu Leu<sub>390</sub> Cys Ala Asp Tyr Ser<sub>395</sub> Glu Asn Thr Phe Thr<sub>400</sub>  
 Glu Tyr Lys Lys Lys<sub>405</sub> Leu Ala Glu Arg Leu<sub>410</sub> Lys Ala Lys Leu Pro Glu<sub>415</sub>  
 Ala Thr Pro Thr<sub>420</sub> Glu Leu Ala Lys Leu<sub>425</sub> Val Asn Lys Xaa Ser<sub>430</sub> Asp Phe  
 Ala Ser Asn Cys Cys Ser Ile Asn Ser Pro Pro Leu Tyr<sub>445</sub> Cys Asp Ser  
 Glu Ile Asp Ala Glu Leu Lys Asn Ile Leu<sub>455</sub>  
 Glu Ile Asp Ala Glu Leu Lys Asn Ile Leu<sub>450</sub>

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<211> 458  
<212> PRT  
<213> Homo sapiens

<220>  
<221> MISC\_FEATURE  
<222> (152)..(152)  
<223> X at position 152 may be Glycine or Glutamate

<220>  
<221> MISC\_FEATURE  
<222> (429)..(429)  
<223> X at position 429 may be Arginine or Histidine

<400> 3

Leu Glu Arg Gly Arg Asp Tyr Glu Lys Asn Lys Val Cys Lys Glu Phe  
1 5 10 15

Ser His Leu Gly Lys Glu Asp Phe Thr Ser Leu Ser Leu Val Leu Tyr  
20 25 30

Ser Arg Lys Phe Pro Ser Gly Thr Phe Glu Gln Val Ser Gln Leu Val  
35 40 45

Lys Glu Val Val Ser Leu Thr Glu Ala Cys Cys Ala Glu Gly Ala Asp  
50 55 60

Pro Asp Cys Tyr Asp Thr Arg Thr Ser Ala Leu Ser Ala Lys Ser Cys  
65 70 75 80

Glu Ser Asn Ser Pro Phe Pro Val His Pro Gly Thr Ala Glu Cys Cys  
85 90 95

Thr Lys Glu Gly Leu Glu Arg Lys Leu Cys Met Ala Ala Leu Lys His  
100 105 110

Gln Pro Gln Glu Phe Pro Thr Tyr Val Glu Pro Thr Asn Asp Glu Ile  
115 120 125

Cys Glu Ala Phe Arg Lys Asp Pro Lys Glu Tyr Ala Asn Gln Phe Met  
130 135 140

Trp Glu Tyr Ser Thr Asn Tyr Xaa Gln Ala Pro Leu Ser Leu Leu Val  
145 150 155 160

Ser Tyr Thr Lys Ser Tyr Leu Ser Met Val Gly Ser Cys Cys Thr Ser  
165 170 175

Ala Ser Pro Thr Val Cys Phe Leu Lys Glu Arg Leu Gln Leu Lys His  
180 185 190

Leu Ser Leu Leu Thr Thr Leu Ser Asn Arg Val Cys Ser Gln Tyr Ala  
195 200 205

Ala Tyr Gly Glu Lys Lys Ser Arg Leu Ser Asn Leu Ile Lys Leu Ala  
210 215 220

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Gln Lys Val Pro Thr Ala Asp Leu Glu Asp Val Leu Pro Leu Ala Glu  
225 230 235 240

Asp Ile Thr Asn Ile Leu Ser Lys Cys Cys Glu Ser Ala Ser Glu Asp  
245 250 255

Cys Met Ala Lys Glu Leu Pro Glu His Thr Val Lys Leu Cys Asp Asn  
260 265 270

Leu Ser Thr Lys Asn Ser Lys Phe Glu Asp Cys Cys Gln Glu Lys Thr  
275 280 285

Ala Met Asp Val Phe Val Cys Thr Tyr Phe Met Pro Ala Ala Gln Leu  
290 295 300

Pro Glu Leu Pro Asp Val Glu Leu Pro Thr Asn Lys Asp Val Cys Asp  
305 310 315 320

Pro Gly Asn Thr Lys Val Met Asp Lys Tyr Thr Phe Glu Leu Ser Arg  
325 330 335

Arg Thr His Leu Pro Glu Val Phe Leu Ser Lys Val Leu Glu Pro Thr  
340 345 350

Leu Lys Ser Leu Gly Glu Cys Cys Asp Val Glu Asp Ser Thr Thr Cys  
355 360 365

Phe Asn Ala Lys Gly Pro Leu Leu Lys Lys Glu Leu Ser Ser Phe Ile  
370 375 380

Asp Lys Gly Gln Glu Leu Cys Ala Asp Tyr Ser Glu Asn Thr Phe Thr  
385 390 395 400

Glu Tyr Lys Lys Lys Leu Ala Glu Arg Leu Lys Ala Lys Leu Pro Asp  
405 410 415

Ala Thr Pro Lys Glu Leu Ala Lys Leu Val Asn Lys Xaa Ser Asp Phe  
420 425 430

Ala Ser Asn Cys Cys Ser Ile Asn Ser Pro Pro Leu Tyr Cys Asp Ser  
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Glu Ile Asp Ala Glu Leu Lys Asn Ile Leu  
450 455

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<211> 83  
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<223> Synthetic Peptide

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 <222> (55)..(55)  
 <223> Xaa can be any naturally occurring amino acid

<400> 4

Leu Leu Lys Lys Glu Leu Ser Ser Phe Ile Asp Lys Gly Gln Glu Leu  
 1 5 10 15

Cys Ala Asp Tyr Ser Glu Asn Thr Phe Thr Glu Tyr Lys Lys Lys Leu  
 20 25 30

Ala Glu Arg Leu Lys Ala Lys Leu Pro Asp Ala Thr Pro Thr Glu Leu  
 35 40 45

Ala Lys Leu Val Asn Lys Xaa Ser Asp Phe Ser Asn Cys Cys Ser Ile  
 50 55 60

Asn Ser Pro Pro Leu Tyr Cys Asp Ser Glu Ile Asp Ala Glu Leu Lys  
 65 70 75 80

Asn Ile Leu

<210> 5  
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 <223> Xaa can be any naturally occurring amino acid

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Leu Leu Lys Lys Glu Leu Ser Ser Phe Ile Asp Lys Gly Gln Glu Leu  
 1 5 10 15

Cys Ala Asp Tyr Ser Glu Asn Thr Phe Thr Glu Tyr Lys Lys Lys Leu  
 20 25 30

Ala Glu Arg Leu Lys Ala Lys Leu Pro Asp Ala Thr Pro Lys Glu Leu  
 35 40 45

Ala Lys Leu Val Asn Lys Xaa Ser Asp Phe Ala Ser Asn Cys Cys Ser  
 50 55 60

Ile Asn Ser Pro Pro Leu Tyr Cys Asp Ser Glu Ile Asp Ala Glu Leu  
 65 70 75 80

Lys Asn Ile Leu