SEQUENCE LISTING

<110> AGENCY FOR SCIENCE TECHNOLOGY AND RESEARCH
LIM, BING
ZHANG, WENCAI

<120> Targeting metabolic enzymes in human cancer

<130> AY/YF/ak/2011.6054

<150> SG 201008288-1
<151> 2010-11-11

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<170> PatentIn version 3.5

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35 40 45

Ala Ser Arg Leu Leu Glu Arg Leu Leu Pro Arg His Asp Asp Phe Ala
50 55 60

Arg Arg His Ile Gly Pro Gly Asp Lys Asp Gln Arg Glu Met Leu Gln
65 70 75 80

Thr Leu Gly Leu Ala Ser Ile Asp Glu Leu Ile Glu Lys Thr Val Pro
85 90 95

Ala Asn Ile Arg Leu Lys Arg Pro Leu Lys Met Glu Asp Pro Val Cys
100 105 110

Glu Asn Glu Ile Leu Ala Thr Leu His Ala Ile Ser Ser Lys Asn Gln
115 120 125

Ile Trp Arg Ser Tyr Ile Gly Met Gly Tyr Tyr Asn Cys Ser Val Pro
130 135 140

Gln Thr Ile Leu Arg Asn Leu Leu Glu Asn Ser Gly Trp Ile Thr Gln
145 150 155 160

Tyr Thr Pro Tyr Gln Pro Glu Val Ser Gln Gly Arg Leu Glu Ser Leu
165 170 175

Leu Asn Tyr Gln Thr Met Val Cys Asp Ile Thr Gly Leu Asp Met Ala

180 185 190

Asn Ala Ser Leu Leu Asp Glu Gly Thr Ala Ala Ala Glu Ala Leu Gln
195 200 205

Leu Cys Tyr Arg His Asn Lys Arg Arg Lys Phe Leu Val Asp Pro Arg
210 215 220

Cys His Pro Gln Thr Ile Ala Val Val Gln Thr Arg Ala Lys Tyr Thr
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Gly Val Leu Thr Glu Leu Lys Leu Pro Cys Glu Met Asp Phe Ser Gly
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Lys Asp Val Ser Gly Val Leu Phe Gln Tyr Pro Asp Thr Glu Gly Lys
260 265 270

Val Glu Asp Phe Thr Glu Leu Val Glu Arg Ala His Gln Ser Gly Ser
275 280 285

Leu Ala Cys Cys Ala Thr Asp Leu Leu Ala Leu Cys Ile Leu Arg Pro
290 295 300

Pro Gly Glu Phe Gly Val Asp Ile Ala Leu Gly Ser Ser Gln Arg Phe
305 310 315 320

Gly Val Pro Leu Gly Tyr Gly Gly Pro His Ala Ala Phe Phe Ala Val
325 330 335

Arg Glu Ser Leu Val Arg Met Met Pro Gly Arg Met Val Gly Val Thr
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Arg Asp Ala Thr Gly Lys Glu Val Tyr Arg Leu Ala Leu Gln Thr Arg
355 360 365

Glu Gln His Ile Arg Arg Asp Lys Ala Thr Ser Asn Ile Cys Thr Ala
370 375 380

Gln Ala Leu Leu Ala Asn Met Ala Ala Met Phe Ala Ile Tyr His Gly
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Ser His Gly Leu Glu His Ile Ala Arg Arg Val His Asn Ala Thr Leu
405 410 415

Ile Leu Ser Glu Gly Leu Lys Arg Ala Gly His Gln Leu Gln His Asp
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Val Leu Gly Arg Ala Ala Gln Arg Gln Ile Asn Phe Arg Leu Phe Glu

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Val Ala Glu Ser Met Gly Glu Glu Cys Arg Gly Ile Pro Gly Ser Val
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Phe Lys Arg Thr Ser Pro Phe Leu Thr His Gln Val Phe Asn Ser Tyr
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His Ser Glu Thr Asn Ile Val Arg Tyr Met Lys Lys Leu Glu Asn Lys
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Asp Ile Ser Leu Val His Ser Met Ile Pro Leu Gly Ser Cys Thr Met
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Lys Leu Asn Ser Ser Ser Glu Leu Ala Pro Ile Thr Trp Lys Glu Phe
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Ala Asn Ile His Pro Phe Val Pro Leu Asp Gln Ala Gln Gly Tyr Gln
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Gln Leu Phe Arg Glu Leu Glu Lys Asp Leu Cys Glu Leu Thr Gly Tyr
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Asp Gln Val Cys Phe Gln Pro Asn Ser Gly Ala Gln Gly Glu Tyr Ala
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Gly Leu Ala Thr Ile Arg Ala Tyr Leu Asn Gln Lys Gly Glu Gly His
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Arg Thr Val Cys Leu Ile Pro Lys Ser Ala His Gly Thr Asn Pro Ala
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Ser Ala His Met Ala Gly Met Lys Ile Gln Pro Val Glu Val Asp Lys
            660                 665                 670

Tyr Gly Asn Ile Asp Ala Val His Leu Lys Ala Met Val Asp Lys His
        675                 680                 685

Lys Glu Asn Leu Ala Ala Ile Met Ile Thr Tyr Pro Ser Thr Asn Gly
    690                 695                 700

Val Phe Glu Glu Asn Ile Ser Asp Val Cys Asp Leu Ile His Gln His
705                 710                 715                 720

Gly Gly Gln Val Tyr Leu Asp Gly Ala Asn Met Asn Ala Gln Val Gly
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His Lys Thr Phe Cys Ile Pro His Gly Gly Gly Gly Pro Gly Met Gly
755 760 765

Pro Ile Gly Val Lys Lys His Leu Ala Pro Phe Leu Pro Asn His Pro
770 775 780

Val Ile Ser Leu Lys Arg Asn Glu Asp Ala Cys Pro Val Gly Thr Val
785 790 795 800

Ser Ala Ala Pro Trp Gly Ser Ser Ser Ile Leu Pro Ile Ser Trp Ala
805 810 815

Tyr Ile Lys Met Met Gly Gly Lys Gly Leu Lys Gln Ala Thr Glu Thr
820 825 830

Ala Ile Leu Asn Ala Asn Tyr Met Ala Lys Arg Leu Glu Thr His Tyr
835 840 845

Arg Ile Leu Phe Arg Gly Ala Arg Gly Tyr Val Gly His Glu Phe Ile
850 855 860

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Val Ala Lys Arg Leu Gln Asp Tyr Gly Phe His Ala Pro Thr Met Ser
885 890 895

Trp Pro Val Ala Gly Thr Leu Met Val Glu Pro Thr Glu Ser Glu Asp
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Lys Ala Glu Leu Asp Arg Phe Cys Asp Ala Met Ile Ser Ile Arg Gln
915 920 925

Glu Ile Ala Asp Ile Glu Glu Gly Arg Ile Asp Pro Arg Val Asn Pro
930 935 940

Leu Lys Met Ser Pro His Ser Leu Thr Cys Val Thr Ser Ser His Trp
945 950 955 960

Asp Arg Pro Tyr Ser Arg Glu Val Ala Ala Phe Pro Leu Pro Phe Val
965 970 975

Lys Pro Glu Asn Lys Phe Trp Pro Thr Ile Ala Arg Ile Asp Asp Ile
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His Gln Ser Lys Leu Phe Met Glu Gly Phe Arg Ser Leu Lys Glu Gly
65                  70                  75                  80

Glu Pro Val Glu Phe Thr Phe Lys Lys Ser Ser Lys Gly Leu Glu Ser
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Ile Arg Val Thr Gly Pro Gly Gly Ser Pro Cys Leu Gly Ser Glu Arg
            100                 105                 110

Arg Pro Lys Gly Lys Thr Leu Gln Lys Arg Lys Pro Lys Gly Asp Arg
        115                 120                 125

Cys Tyr Asn Cys Gly Gly Leu Asp His His Ala Lys Glu Cys Ser Leu
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Pro Pro Gln Pro Lys Lys Cys His Tyr Cys Gln Ser Ile Met His Met
145                 150                 155                 160

Val Ala Asn Cys Pro His Lys Asn Val Ala Gln Pro Pro Ala Ser Ser
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Gln Gly Arg Gln Glu Ala Glu Ser Gln Pro Cys Thr Ser Thr Leu Pro
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Arg Glu Val Gly Gly Gly His Gly Cys Thr Ser Pro Pro Phe Pro Gln
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Glu Ala Arg Ala Glu Ile Ser Glu Arg Ser Gly Arg Ser Pro Gln Glu
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